

Service Manual

[TOP](#) [NEXT](#)

ORDER NO. MKE0307850C1

B2

Service Manual

Multi Media Display

- PT-50LC13



PbF
Solder Lead free



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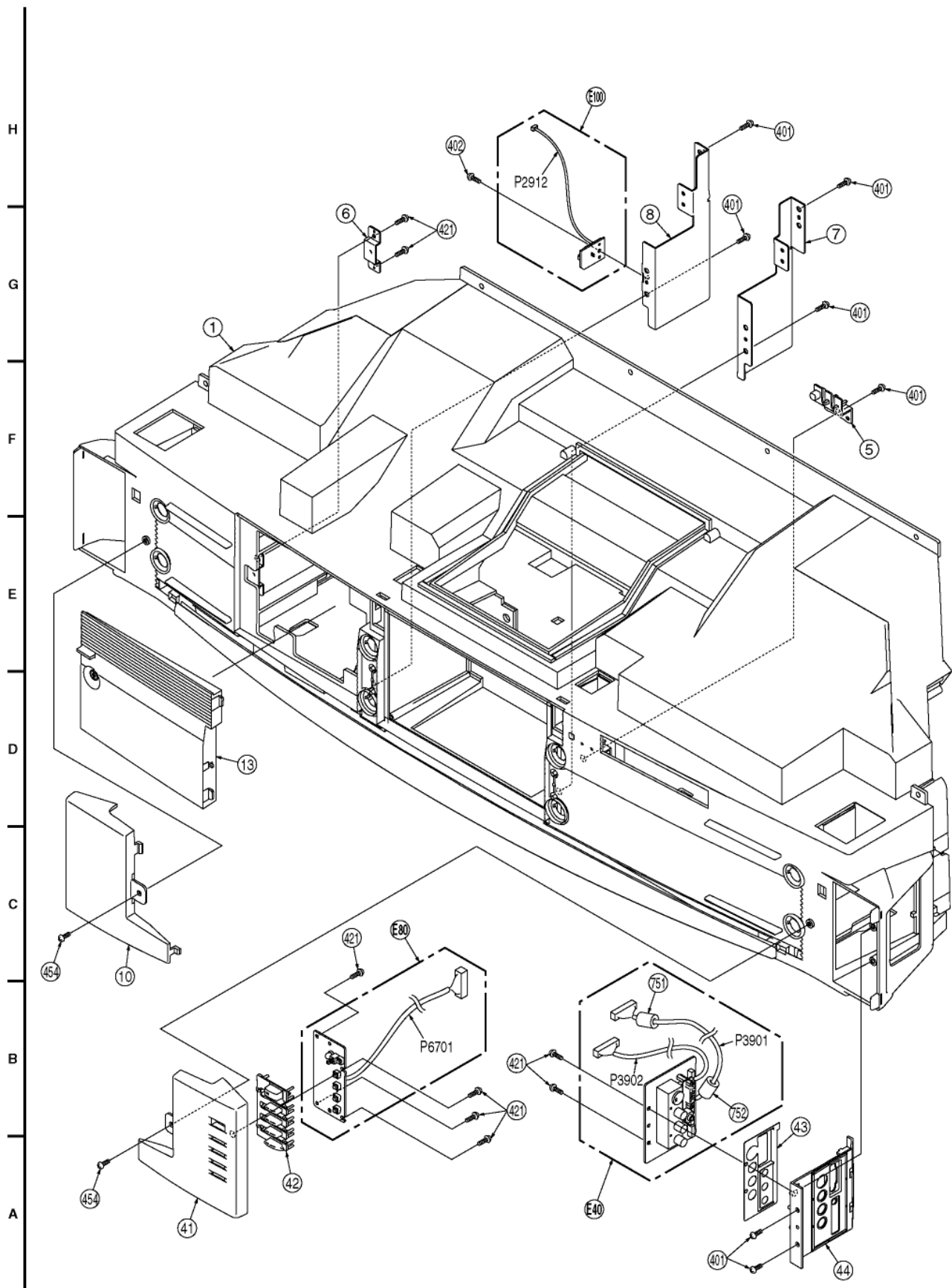


This service information is designed for experienced repair technicians. It does not contain warnings or cautions to advise non-technical individuals. Products powered by electricity should be serviced or repaired only by qualified personnel. Do not attempt to repair the product or products dealt with in this service information.

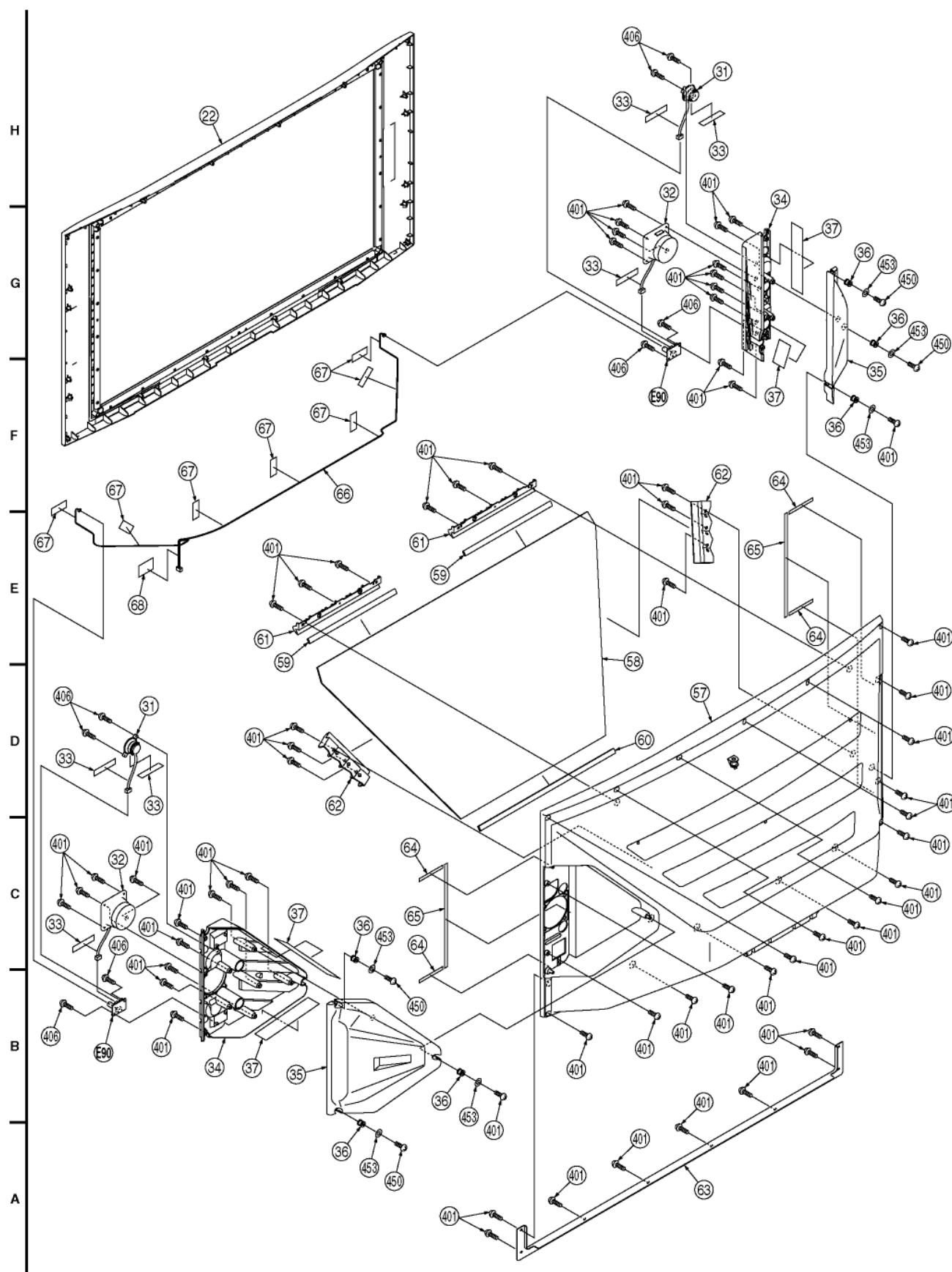
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[TOP](#) [NEXT](#)

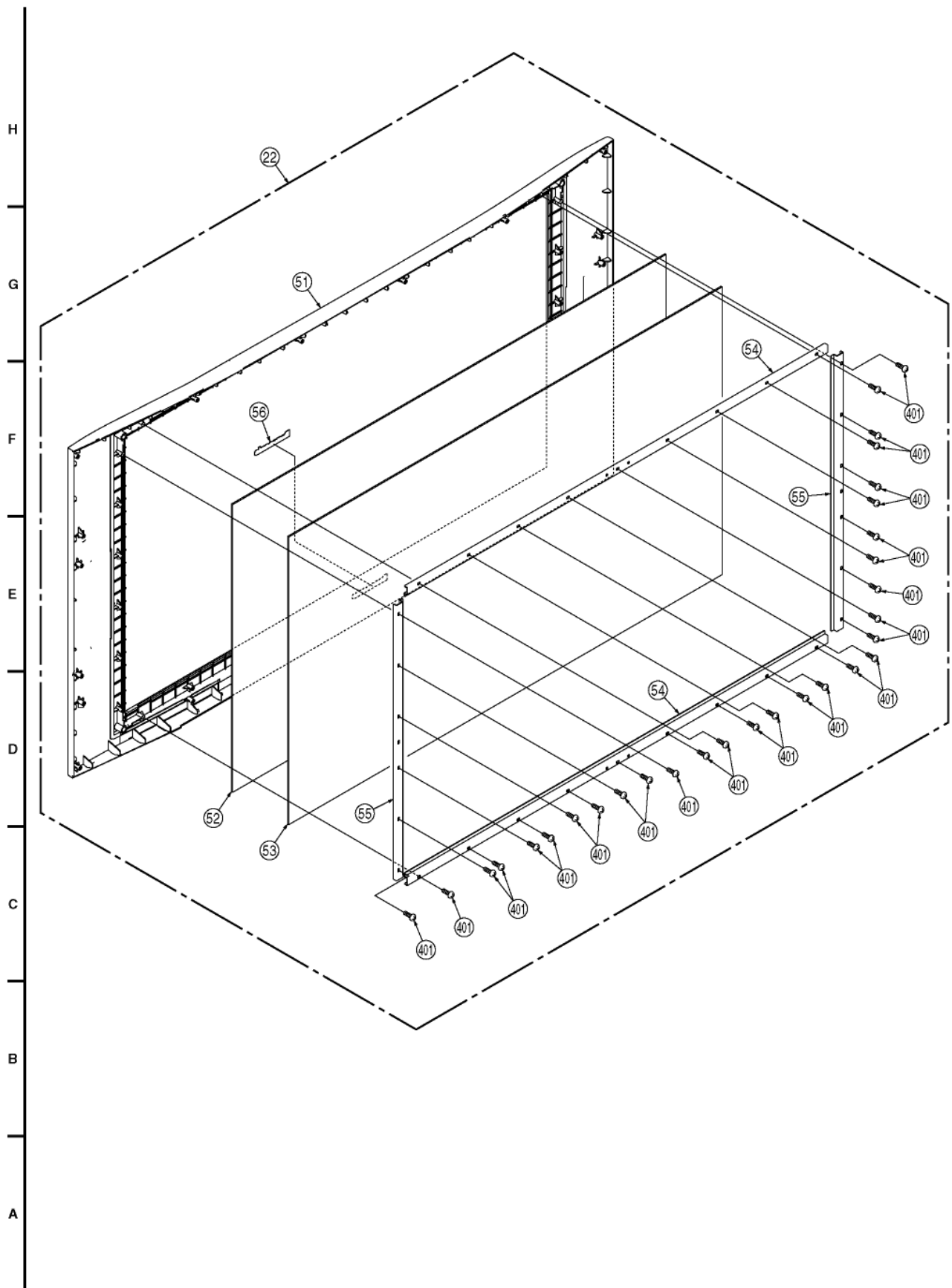
② FRONT AND BASE SECTION



3 DISPLAY SECTION




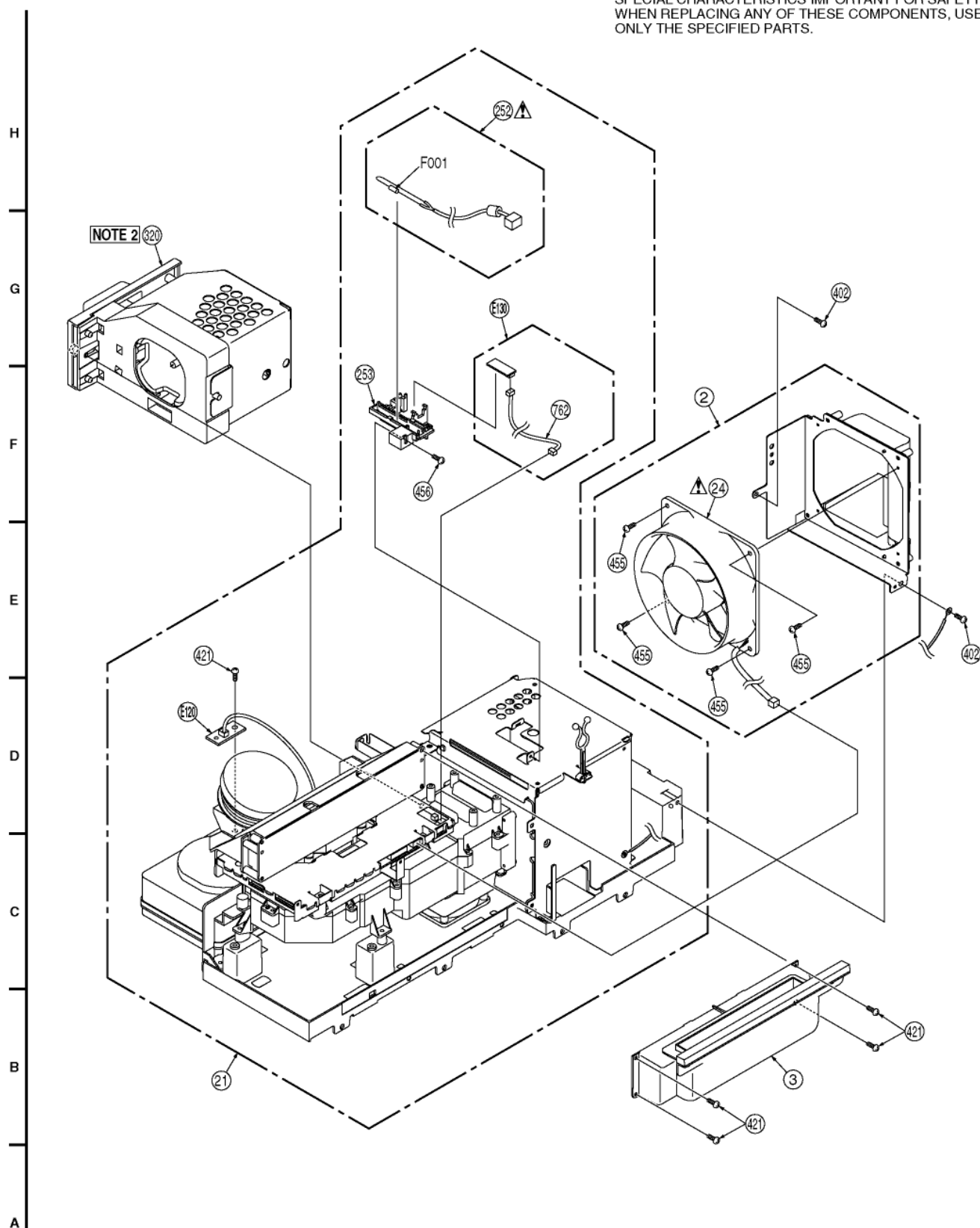
4 SCREEN SECTION



5 PROJECTION SECTION

IMPORTANT SAFETY NOTICE


COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

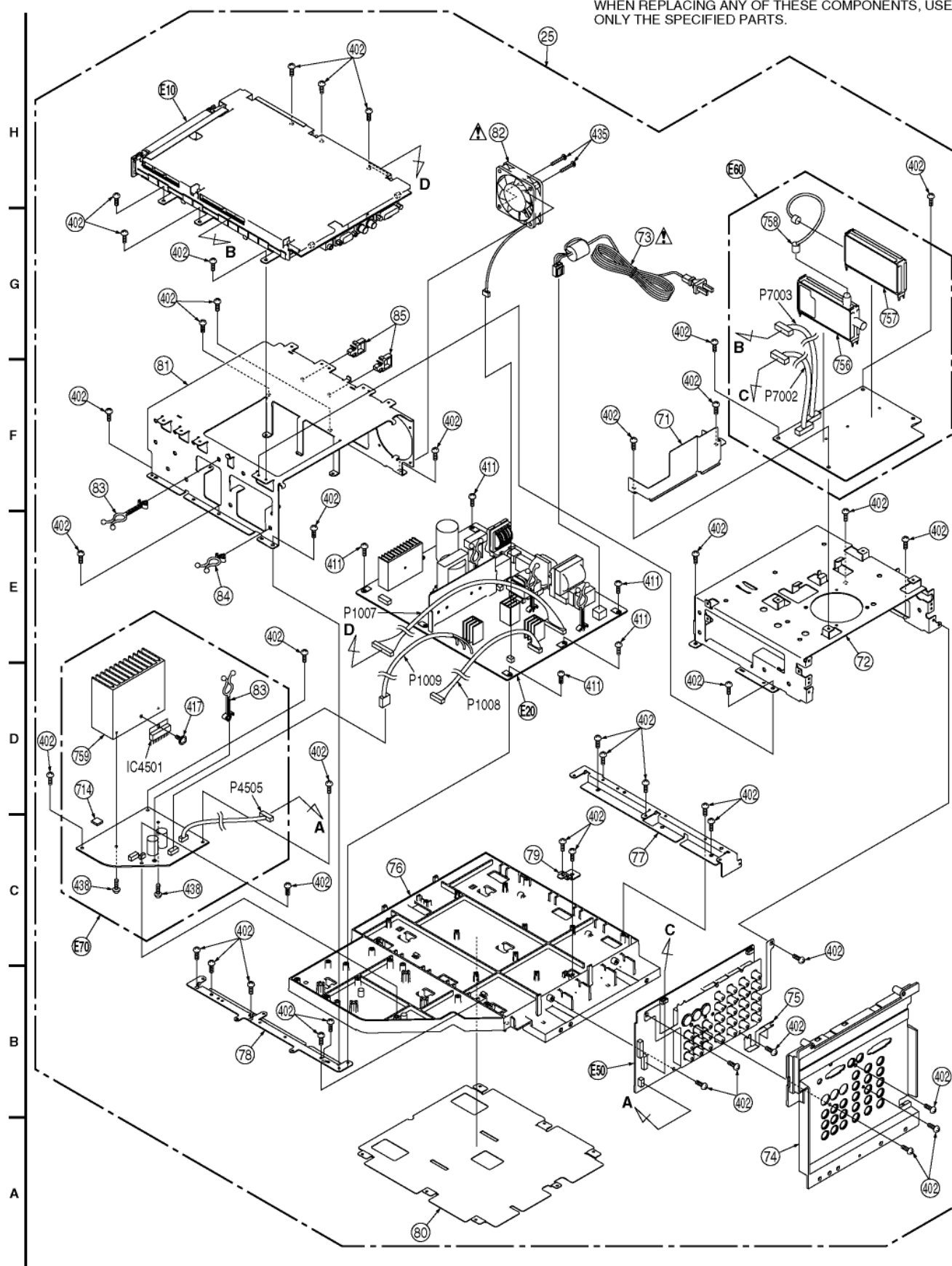


NOTE 2:

The Lamp Unit (TY-LA1000) is not supplied as a replacement part. It is sold separately. To purchase a replacement, call the Panasonic accessory department.

6 TV AND TUNER SECTION

IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.




12.2 MECHANICAL REPLACEMENT PARTS LIST



[TOP](#) [PREVIOUS](#) [NEXT](#)


Definition of Parts supplier:

1. Parts with mark "MKA" in the Remarks column are supplied from MKA.
2. Parts without mark in the Remarks column are supplied from MKE.

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
1	LSYK1216	BASE BODY UNIT	2 MKA
2	LSXY0507	FAN 3 UNIT	5 MKA
3	LSXA0531	TOP DUCT 3 UNIT	5 MKA
5	LSGL0390	INFRARED PIECE	2 MKA
6	LSMA0688	LAMP COVER FIX PLATE,STEEL	2 MKA
7	LSMA0697	DISPLAY SUPPORT PLATE R,STEEL	2 MKA
8	LSMA0696	DISPLAY SUPPORT PLATE L,STEEL	2 MKA
9	LSYK1210	FRONT COVER UNIT	1 MKA
10	LSKG0036	FRONT SIDE COVER L	2 MKA
11	LSYY0031	SD DOOR UNIT	1 MKA
12	LSKF0528	OPTICAL COVER	1 MKA
13	LSYK1220	LAMP COVER UNIT	2 MKA
14	LSJA0467	CONNECTOR CABLE W/PLUG	1 MKA
15	LSSC0648	GROUNDING PLATE A,STEEL	1 MKA
16	LSMA0686	REAR SUPPORT PLATE,STEEL	1 MKA
17	LSGV0057	REAR COVER	1 MKA
18	STL450-3-1BK	CLAMPER	1 MKA
19	SLCSE2-500-3	CLAMPER	1 MKA
20	LSXA0478	CLAMPER UNIT	1 MKA
21	LSXA0528-HBS	PROJECTION UNIT	5 RTL
22	LSYK1214	SCREEN UNIT	3,4 MKA
23	TMM14414	STRIKE	1 MKA
24	FBL12G12L2CS	FAN 3	5  MKA
25	LSXY0503	TV/TUNER UNIT	1,6 RTL MKA
31	EASG5PH519A2	TWEETER	3 MKA
32	EASG10P579A2	WOOFER	3 MKA
33	LSMF0290	SPACER	3 MKA
34	LSGQ0088	SPEAKER BOX FRONT	3 MKA
35	LSGQ0089	SPEAKER BOX REAR	3 MKA
36	TMMJ058	SPEAKER RUBBER	3 MKA
37	LSMF0278	ACOUSTIC CUSHION	3 MKA
41	LSKG0037	FRONT SIDE COVER R	2 MKA

42	LSXU0012	OPERATION BUTTON UNIT	2 MKA
43	LSSC0645	FRONT JACK GROUNDING PLATE,STEEL	2
44	LSJH0066	SIDE JACK HOLDER	2
51	LSGY0165	ESCUTCHEON	4 MKA
52	LSGP0365	LENTICULAR SCREEN	4 MKA
53	LSGP0366	FRESNEL LENS	4 MKA
54	LSXA0548	SCREEN PLATE H UNIT,STEEL	4 MKA
55	LSXA0549	SCREEN PLATE V UNIT,STEEL	4 MKA
56	TBM2AA0071	PANASONIC BADGE	4 MKA
57	LSGV0056	BACK COVER	3 MKA
58	LSDL0243	MIRROR	3 MKA
59	LSMF0280	SPACER	3 MKA
60	LSMF0281	SPACER	3 MKA
61	LSGQ0092	MIRROR HOLDER H	3 MKA
62	LSYF0541	MIRROR HOLDER V UNIT	3 MKA
63	LSMA0700	BACK COVER PLATE,STEEL	3 MKA
64	LSMF0288	SPACER	3 MKA
65	LSMF0289	SPACER	3 MKA
66	LSJA0474	CONENCTOR CABLE W/PLUG,	3 MKA
67	LSMF0291	SPACER	3 MKA
68	LSMF0292	SPACER	3 MKA
69	TMM77409	CLAMPER	1 MKA
71	LSSC0669	TUNER SHIELD PLATE,STEEL	6 MKA
72	LSMA0691	TUNER PCB FRAME	6
73	LSJA0456-FE	AC CORD W/PLUG	6 
74	LSJH0065	REAR JACK HOLDER	6
75	LSSC0672	GROUNDING PLATE C,STEEL	6
76	LSMP0440	PCB FRAME	6
77	LSMA0693	PCB FRAME PLATE LEFT,STEEL	6
78	LSMA0694	PCB FRAME PLATE RIGHT,STEEL	6
79	LSMA0695	PCB FRAME PLATE CENTER,STEEL	6
80	LSSC0646	BOTTOM SHIELD PLATE	6
81	LSMA0690	MAIN PCB FRAME	6
82	L6FAKCDH0007	FAN 4	6 
83	TMM5439-1	CLAMPER	6
84	TMM7464-1	CLAMPER	6
85	LSGP0369	CLAMPER	6
101	LSPG1547	CARTON BOX	7 MKA
102	LSPG1548	CARTON BOX BOTTOM	7 MKA
103	LSPN0339	CUSHION TOP L,STYROFOAM	7 MKA
104	LSPN0340	CUSHION TOP R,STYROFOAM	7 MKA
105	LSPN0341	CUSHION BOTTOM L,STYROFOAM	7 MKA
106	LSPN0342	CUSHION BOTTOM R,STYROFOAM	7 MKA
107	LSPG1549	INSIDE CARTON	7 MKA
108	LSPF0111	BAG,POLYETHYLENE	7 MKA
109	EUR7603ZB0	INFRARED REMOTE CONTROL UNIT	7 MKA

110	LSJA0239	RGB CABLE W/PLUG	7 MKA
111	LSQF0738	FAN BAG	7 MKA
111	LSQF0747	FAN BAG	7 MKA
112	K1HA24DA0003	DVI CABLE W/PLUG	7 MKA
113	LSPN0430	FRONT CUSHION	7 MKA
252	LSJA0464-FE	THERMAL FUSE UNIT	5 
253	LSMP0420	SENSOR HOLDER	5
401	XTV4+16A	TAPPING SCREW,STEEL	1,2,3,4 MKA
402	XTV3+8J	TAPPING SCREW,STEEL	1,2,5,6 MKA
406	XTV3+10J	TAPPING SCREW,STEEL	3 MKA
411	XYE3+FF8	SCREW W/WASHER,STEEL	6
417	XYN3+K10	SCREW W/WASHER,STEEL	6
421	XTV3+8G	TAPPING SCREW,STEEL	2,5 MKA
435	XTV3+20J	TAPPING SCREW,STEEL	6
438	XTW3+10J	TAPPING SCREW,STEEL	6
450	XTV4+30A	TAPPING SCREW,STEEL	3 MKA
451	XTW3+8Q	TAPPING SCREW,STEEL	1 MKA
452	XTV3+8F	TAPPING SCREW,STEEL	1 MKA
453	XWG5F16	WASHER,STEEL	3 MKA
454	XTV4+16AFZ	TAPPING SCREW,STEEL	1,2 MKA
455	XTV3+12J	SCREW,STEEL	5 MKA
456	XTV3+6F	TAPPING SCREW,STEEL	5
714	VMTS0035	CUSHION,RUBBER	6
751	J0KA00000044	FERRITE CORE	2
752	LSLQ0307	FERRITE CORE	2
756	ENG36714GF	MAIN TUNER,UHF/VHF NR	6
757	ENG36712GF	SUB TUNER,UHF/VHF NR	6
758	LSJA0468	CONNECTOR CABLE W/PLUG,5V	6
759	LSSC0634	HEAT SINK	6
762	LSJA0478	CONNECTOR CABLE W/PLUG	5
E10	LSXY0508	MAIN C.B.A.	6 RTL
E20	LSEP3088A	POWER C.B.A.	6 RTL
E30	LSEB3087A	BALLAST C.B.A. NR	1
E40	LSEP3094A	FRONT JACK C.B.A.	2 RTL
E50	LSXY0509	REAR JACK C.B.A.	6 RTL
E60	LSEP3095A	TUNER C.B.A.	6 RTL
E70	LSEP3092A	AUDIO AMP C.B.A.	6 RTL
E80	LSEP3096A	OPERATION C.B.A.	2 RTL
E90	LSEP3097A	NETWORK C.B.A.	3 RTL
E100	LSEP3098A	COVER SWITCH C.B.A.	2 RTL
E120	LSEP3099A1	THERMISTOR 1 C.B.A.	5 RTL
E130	LSEP3100A	THERMISTOR 2 C.B.A.	5 RTL

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.3.1 TV STAND (TY-50LC13C)

[TOP](#) [PREVIOUS](#) [NEXT](#)

Ref. No.	Part No.	Part Name & Description	Remarks
301	LSYP0096	SHELF PANEL UNIT	9 MKA
302	LSYC0252	PARTS UNIT	9 MKA
303	LSPF0054	BAG,POLYETHYLENE	9 MKA
304	LSYY0033	TOP PAD	9 MKA
305	LSYY0034	BOTTOM PAD	9 MKA
306	LSPG1573	PACKING CASE,PAPER	9 MKA
307	LSYP0095	TOP PANEL UNIT	8 MKA
308	LSYP0092	REAR POLE UNIT	8 MKA
309	LSYP0093	SIDE POLE L UNIT	8 MKA
310	LSYP0094	SIDE POLE R UNIT	8 MKA
311	LSKU0019	BASE PANEL	8 MKA
312	LSGP0370	SIDE PANEL L	8 MKA
313	LSGP0371	SIDE PANEL R	8 MKA
314	LSQL1525	CAUTION LABEL	8 MKA
460	XTV4+25AK	TAPPING SCREW,STEEL	8 MKA
461	XTV4+45AK	SCREW,STEEL	8 MKA
462	XWE4K	WASHER,STEEL	8 MKA

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.3.2 LAMP UNIT

[TOP](#) [PREVIOUS](#) [NEXT](#)

Ref. No.2	Part No.	Part Name & Description	Remarks
320	TY-LA1000	LAMP UNIT	5 NOTE

NOTE:

The Lamp Unit (TY-LA1000) is not supplied as a replacement part. It is sold separately. To purchase a replacement, call the Panasonic accessory department.

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4 ELECTRICAL REPLACEMENT PARTS LIST

[TOP](#) [PREVIOUS](#) [NEXT](#)

Definition of Parts supplier:

1. All parts are supplied from MKE.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSXY0508	MAIN C.B.A.	E.S.D. RTL
E20	LSEP3088A	POWER C.B.A.	RTL
E30	LSEB3087A	BALLAST C.B.A. NR	
E40	LSEP3094A	FRONT JACK C.B.A.	RTL
E50	LSXY0509	REAR JACK C.B.A.	RTL
E60	LSEP3095A	TUNER C.B.A.	E.S.D. RTL
E70	LSEP3092A	AUDIO AMP C.B.A.	RTL
E80	LSEP3096A	OPERATION C.B.A.	RTL
E90	LSEP3097A	NETWORK C.B.A.	RTL
E100	LSEP3098A	COVER SWITCH C.B.A.	RTL
E120	LSEP3099A1	THERMISTOR 1 C.B.A.	RTL
E130	LSEP3100A	THERMISTOR 2 C.B.A.	RTL

[12.4.1 FRONT JACK C.B.A.](#)

[12.4.2 TUNER C.B.A.](#)

[12.4.3 AUDIO AMP C.B.A.](#)

[12.4.4 OPERATION C.B.A.](#)

[12.4.5 NETWORK C.B.A.](#)

[12.4.6 COVER SWITCH C.B.A.](#)

[12.4.7 THERMISTOR 1 C.B.A.](#)

[12.4.8 THERMISTOR 2 C.B.A.](#)

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.1 FRONT JACK C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D3901	B0BD6R200002	DIODE ZENER 6.2V	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R3901	ERJ6ENF75R0V	MGF CHIP 1/10W 75	
R3902	ERJ6ENF75R0V	MGF CHIP 1/10W 75	
R3903	ERJ6ENF75R0V	MGF CHIP 1/10W 75	
R3904	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3905	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3906	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3907	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3908	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3911	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R3912	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R3913	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R3914	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3915	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3916	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3917	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3918	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4801	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4802	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4803	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4804	ERJ6GEYJ101V	MGF CHIP 1/10W 100	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P3901	LSJA0469	CONNECTOR CABLE W/PLUG,5V	
P3902	LSJA0470	CONNECTOR CABLE W/PLUG,5V	

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK3901	K1FB115A0015	D-SUB MINI JACK SOCKET	
JK4801	K1U412A00008	S-JACK SOCKET	
JK4802	K2HC103A0017	EARPHONE JACK SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks

751	J0KA00000044	FERRITE CORE	
752	LSLQ0307	FERRITE CORE	

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.2 TUNER C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC6501	D750066-330	IC, CMOS STANDARD LOGIC	E.S.D.
IC7501	AN5832SA-E1V	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q7002	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q7002	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q7002	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q7101	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q7101	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q7101	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q7501	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q7501	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q7501	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q7502	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q7502	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q7502	B1ADCF000075	TRANSISTOR SI PNP CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R6502	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6507	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6511	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6516	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6518	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6519	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6520	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6521	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6522	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6523	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6524	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6525	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6526	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6527	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6528	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6529	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6530	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6531	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6532	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	

R6534	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6536	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R7001	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7002	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7003	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7004	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7007	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7008	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R7009	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R7010	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7011	EVMEGSA00B23	VARIABLE 2K	
R7012	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7101	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7102	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7103	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7104	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7105	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7106	ERJ6GEYJ271V	MGF CHIP 1/10W 270	
R7107	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7501	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R7502	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R7503	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R7504	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R7505	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R7506	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R7508	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R7509	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R7510	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R7511	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R7512	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R7513	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R7514	EVNCYAA03B14	VARIABLE 10K	
R7516	ERJ6GEYJ563V	MGF CHIP 1/10W 56K	
R7517	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C6501	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C6502	ECJ2VC1H101J	C CHIP 50V 100PF	
C6503	ECEA0JKA101I	ELECTROLYTIC 6.3V 100UF	
C6504	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6505	ECJ2VC1H101J	C CHIP 50V 100PF	
C7001	ECJ2VB1H222K	C CHIP 50V 0.0022UF	
C7002	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C7003	ECJ2VB1H222K	C CHIP 50V 0.0022UF	
C7004	ECJ2VC1H330J	C CHIP 50V 33PF	
C7007	ECJ2VB1H102K	C CHIP 50V 1000PF	

C7008	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C7009	ECEA1CKA100I	ELECTROLYTIC 16V 10UF	
C7101	ECJ2VB1H222K	C CHIP 50V 0.0022UF	
C7102	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C7103	ECJ2VB1H222K	C CHIP 50V 0.0022UF	
C7107	ECJ2VB1H102K	C CHIP 50V 1000PF	
C7501	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C7502	ECEA1HKA2R2I	ELECTROLYTIC 50V 2.2UF	
C7503	ECEA1CKA100I	ELECTROLYTIC 16V 10UF	
C7504	ECEA1HKAR33I	ELECTROLYTIC 50V 0.33UF	
C7505	ECEA1HKA3R3I	ELECTROLYTIC 50V 3.3UF	
C7507	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C7508	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C7509	ECEA0JKA101I	ELECTROLYTIC 6.3V 100UF	
C7510	ECEA1HKA2R2I	ELECTROLYTIC 50V 2.2UF	
C7513	ECEA1CKA100I	ELECTROLYTIC 16V 10UF	
C7514	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C7515	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C7516	ECJ2VB1H333K	C CHIP 50V 0.033UF	
C7517	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C7518	ECEA1HKA2R2I	ELECTROLYTIC 50V 2.2UF	
C7519	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C7520	ECEA1HKAR33I	ELECTROLYTIC 50V 0.33UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L7001	VLQSAB7D100K	COIL 10UH	
L7101	VLQSAB7D100K	COIL 10UH	
L7501	ELESN101KA	COIL 100UH	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X6501	EFOEC4004T4	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P7002	LSJA0465	CONNECTOR CABLE W/PLUG,	
P7003	LSJA0466	CONNECTOR CABLE W/PLUG,33V	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
756	ENG36714GF	MAIN TUNER,UHF/VHF NR	
757	ENG36712GF	SUB TUNER,UHF/VHF NR	
758	LSJA0468	CONNECTOR CABLE W/PLUG,5V	

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.3 AUDIO AMP C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC4501	C1AA00000660	IC, LINEAR	
IC4503	C0CAAKE00013	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q4501	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q4501	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4501	B1ABCF000106	TRANSISTOR SI NPN CHIP	
Q4504	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q4504	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4504	B1ABCF000106	TRANSISTOR SI NPN CHIP	
Q4505	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q4505	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4505	B1ABCF000106	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D4501	MAZ40510MF	DIODE ZENER 5.1V	
D4501	HZS5C2TD	DIODE ZENER 5.1V	
D4501	HZS5C3TD	DIODE ZENER 5.1V	
D4504	MA2C16700E	DIODE SI	
D4504	B0AAEL000001	DIODE SI	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R4501	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4502	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R4503	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4504	ERX1SJ4R7P	METAL FILM 1W 4.7	
R4505	ERX1SJ4R7P	METAL FILM 1W 4.7	
R4506	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R4507	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R4508	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4509	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4510	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R4511	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R4512	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R4513	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R4525	ERJ6GEY0R00V	MGF CHIP 1/10W 0	

R4526	ERJ6GEYJ821V	MGF CHIP 1/10W 820	
R4527	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4543	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4544	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4545	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4546	ERJ6GEY0R00V	MGF CHIP 1/10W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C4501	ECA1VM102B	ELECTROLYTIC 35V 1000UF	
C4502	ECA1VM102B	ELECTROLYTIC 35V 1000UF	
C4503	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C4504	ECQB1H104KF3	POLYESTER 50V 0.1UF	
C4505	ECQB1H104KF3	POLYESTER 50V 0.1UF	
C4506	ECJ2VB1E473K	C CHIP 25V 0.047UF	
C4507	ECJ2VB1E473K	C CHIP 25V 0.047UF	
C4508	ECJ2VB1E683K	C CHIP 25V 0.068UF	
C4509	ECJ2VB1E683K	C CHIP 25V 0.068UF	
C4510	ECEA1HKN010B	ELECTROLYTIC 50V 1UF	
C4511	ECEA1HKN010B	ELECTROLYTIC 50V 1UF	
C4512	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4513	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4514	ECA1HM100B	ELECTROLYTIC 50V 10	
C4516	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C4526	ECEA1CKN100B	ELECTROLYTIC 16V 10UF	
C4527	ECEA1CKN100B	ELECTROLYTIC 16V 10UF	
C4528	ECEA1EKA4R7B	ELECTROLYTIC 25V 4.7UF	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4501	K1KA03A00008	CONNECTOR 3P	
P4503	K1KA04A00192	CONNECTOR 2P	
P4505	LSJA0473	CONNECTOR CABLE W/PLUG,5V	

RELAY

Ref. No.	Part No.	Part Name & Description	Remarks
RL4501	K6B2AGA00038	RELAY	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
83	TMM5439-1	CLAMPER	
417	XYN3+K10	SCREW W/WASHER,STEEL	
438	XTW3+10J	TAPPING SCREW,STEEL	
714	VMTS0035	CUSHION,RUBBER	
759	LSSC0634	HEAT SINK	

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.4 OPERATION C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q6701	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q6701	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q6701	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q6702	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q6702	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q6702	B1ADCF000075	TRANSISTOR SI PNP CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D6701	B3AGA0000072	LIGHT EMITTING DIODE GREEN	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R6702	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6703	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6704	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R6705	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6706	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6707	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P6701	LSJA0472	CONNECTOR CABLE W/PLUG,5V	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6701	EVQ11G05R	SWITCH PUSH	
SW6702	EVQ11G05R	SWITCH PUSH	
SW6703	EVQ11G05R	SWITCH PUSH	
SW6704	EVQ11G05R	SWITCH PUSH	
SW6705	EVQ11G05R	SWITCH PUSH	

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.5 NETWORK C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C4551	F2J1J3R3A003	ELECTROLYTIC 63V 3.3UF	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4551	K1KA02A00229	CONNECTOR 2P	
P4552	K1KA02A00188	CONNECTOR 2P	
P4553	K1KA02A00008	CONNECTOR 2P	

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.6 COVER SWITCH C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P2912	LSJA0476	CONNECTOR CABLE W/PLUG	

SWITCHES


Ref. No.	Part No.	Part Name & Description	Remarks
SW2911	K0L1BA000070	SWITCH PUSH	

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.7 THERMISTOR 1 C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R2811	D4CA35030002	THERMISTER	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P2811	K1KA02A00096	CONNECTOR 2P	

MISCELLANEOUS


Ref. No.	Part No.	Part Name & Description	Remarks
761	LSJA0477	CONNECTOR CABLE W/PLUG,	

[TOP](#) [PREVIOUS](#) [NEXT](#)

12.4.8 THERMISTOR 2 C.B.A.

[TOP](#) [PREVIOUS](#) [NEXT](#)

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R2821	D4CE31330001	THERMISTOR	

PIN HEADERS

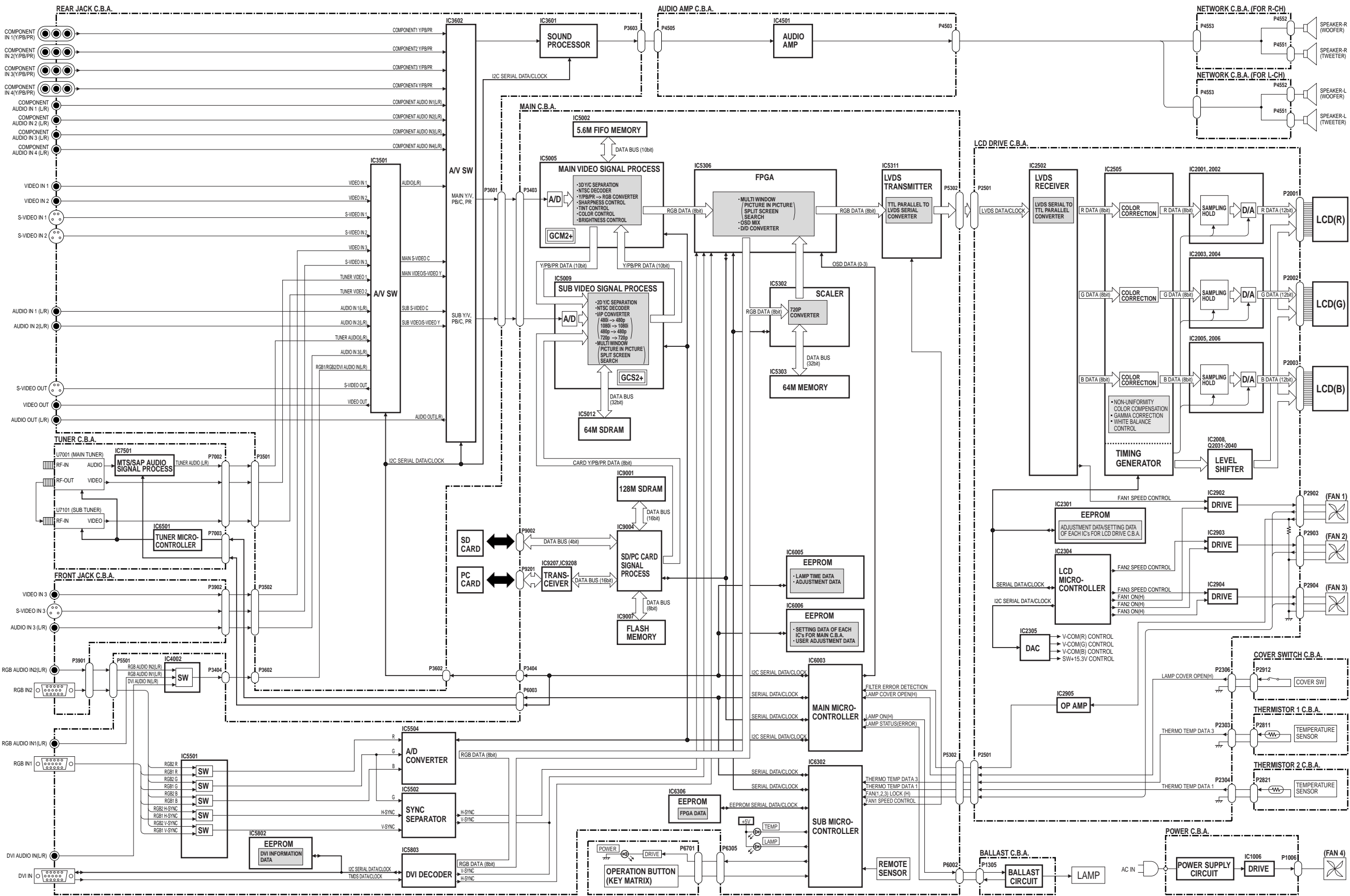
Ref. No.	Part No.	Part Name & Description	Remarks
P2821	K1KA02B00051	CONNECTOR 2P	

MISCELLANEOUS

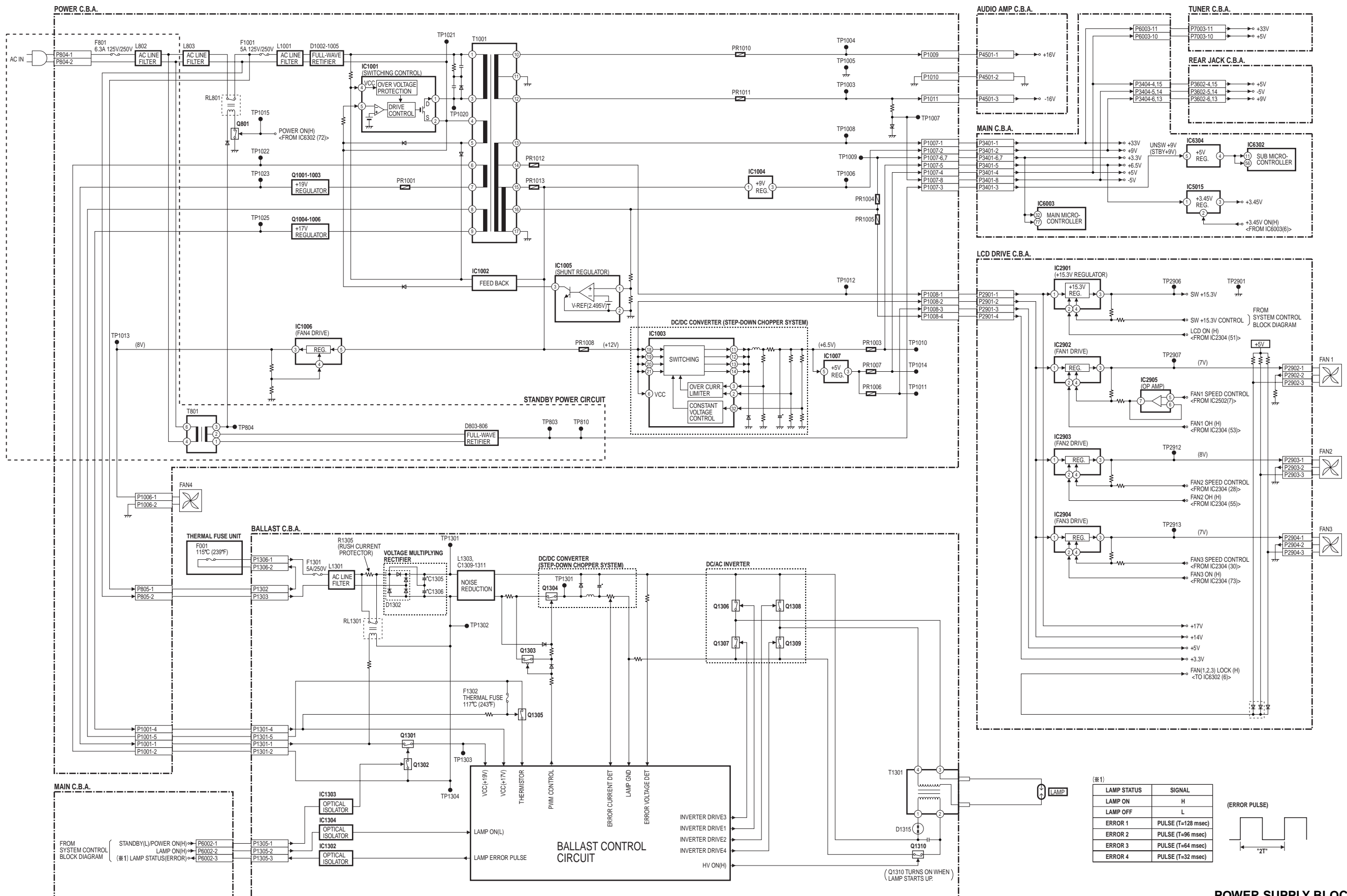
Ref. No.	Part No.	Part Name & Description	Remarks
762	LSJA0478	CONNECTOR CABLE W/PLUG,	

[TOP](#) [PREVIOUS](#) [NEXT](#)

OVERALL BLOCK DIAGRAM

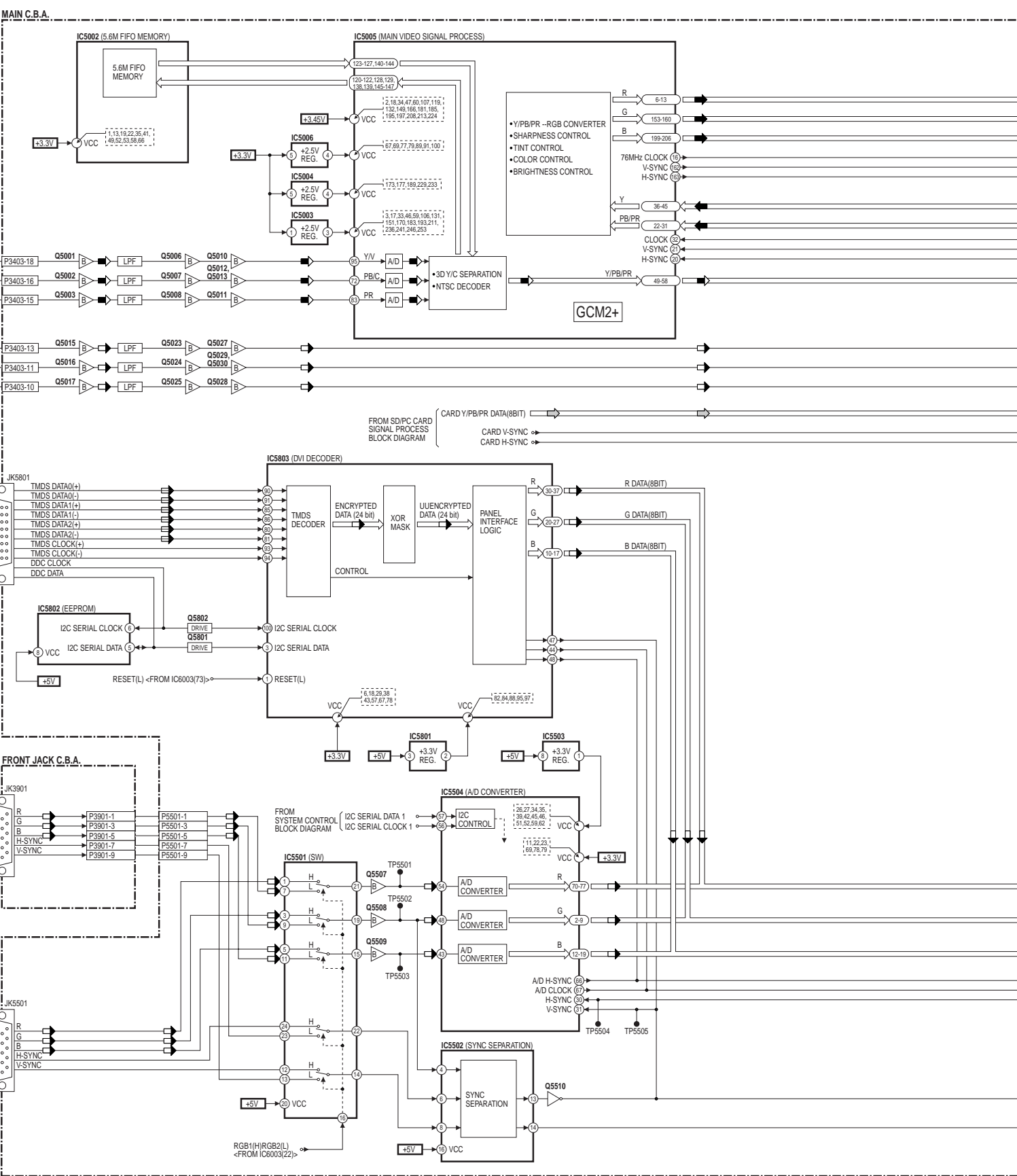
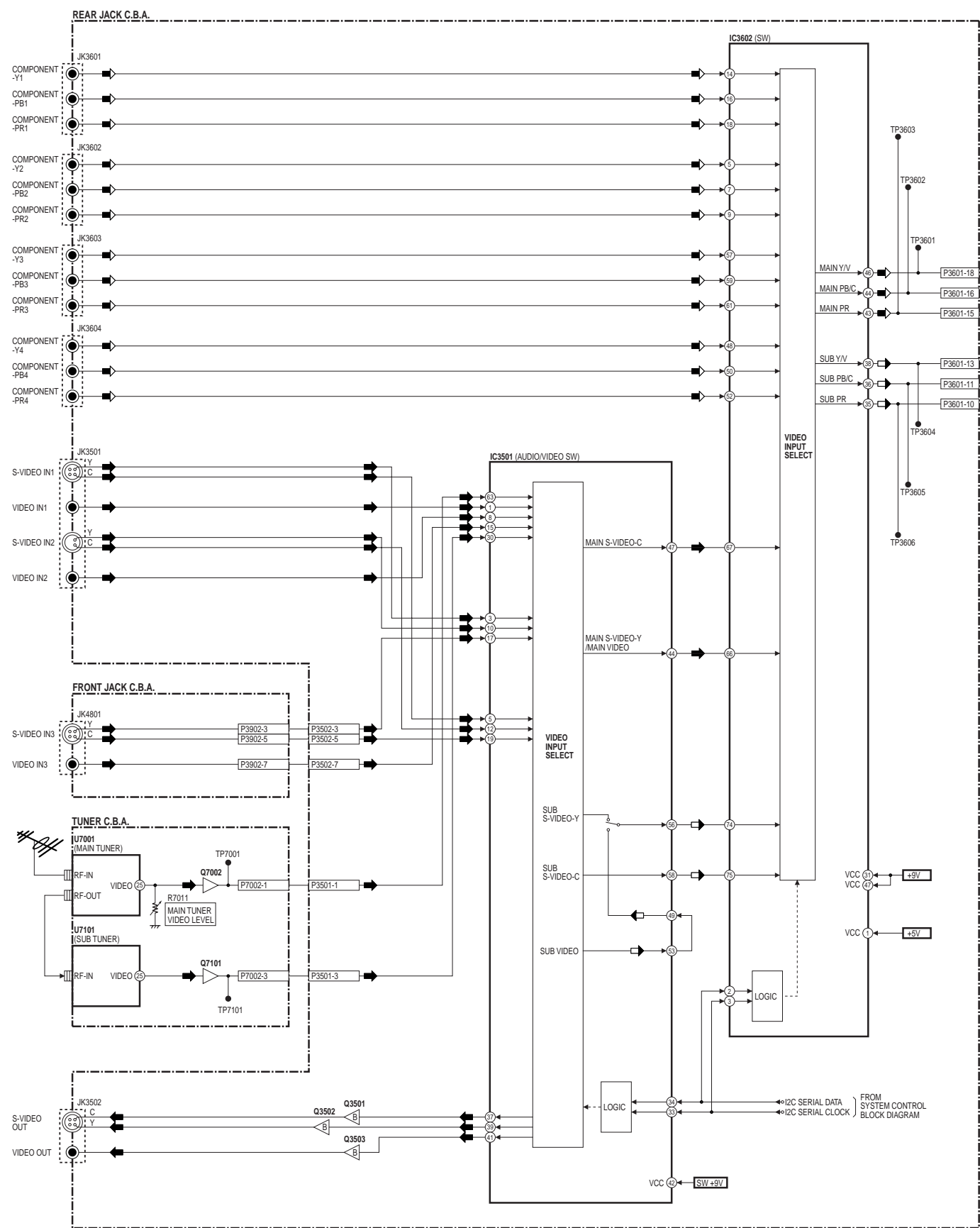


OVERALL BLOCK DIAGRAM
PT-50LC13



POWER SUPPLY BLOCK DIAGRAM

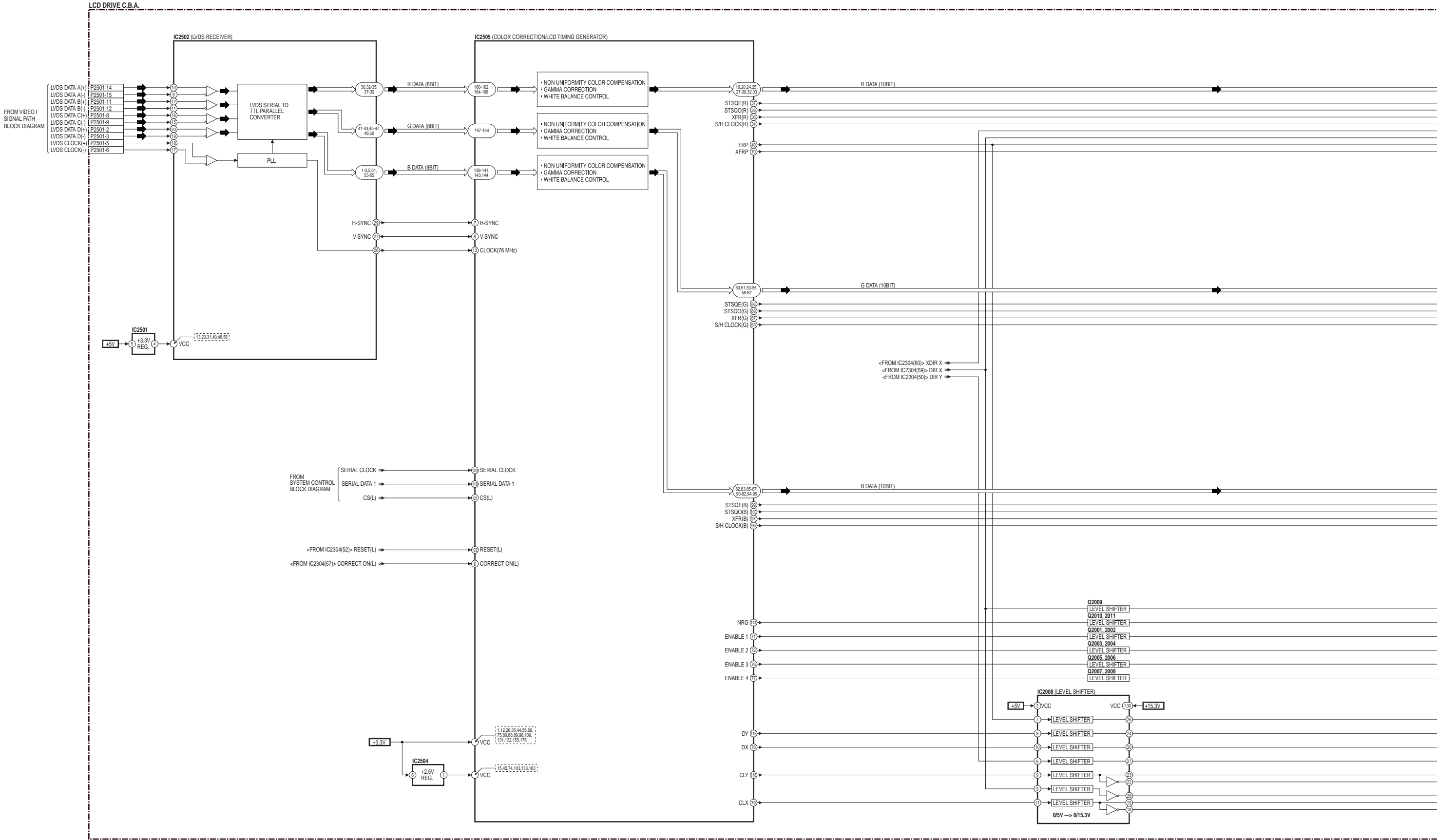
VIDEO SIGNAL PATH I BLOCK DIAGRAM (1/2)



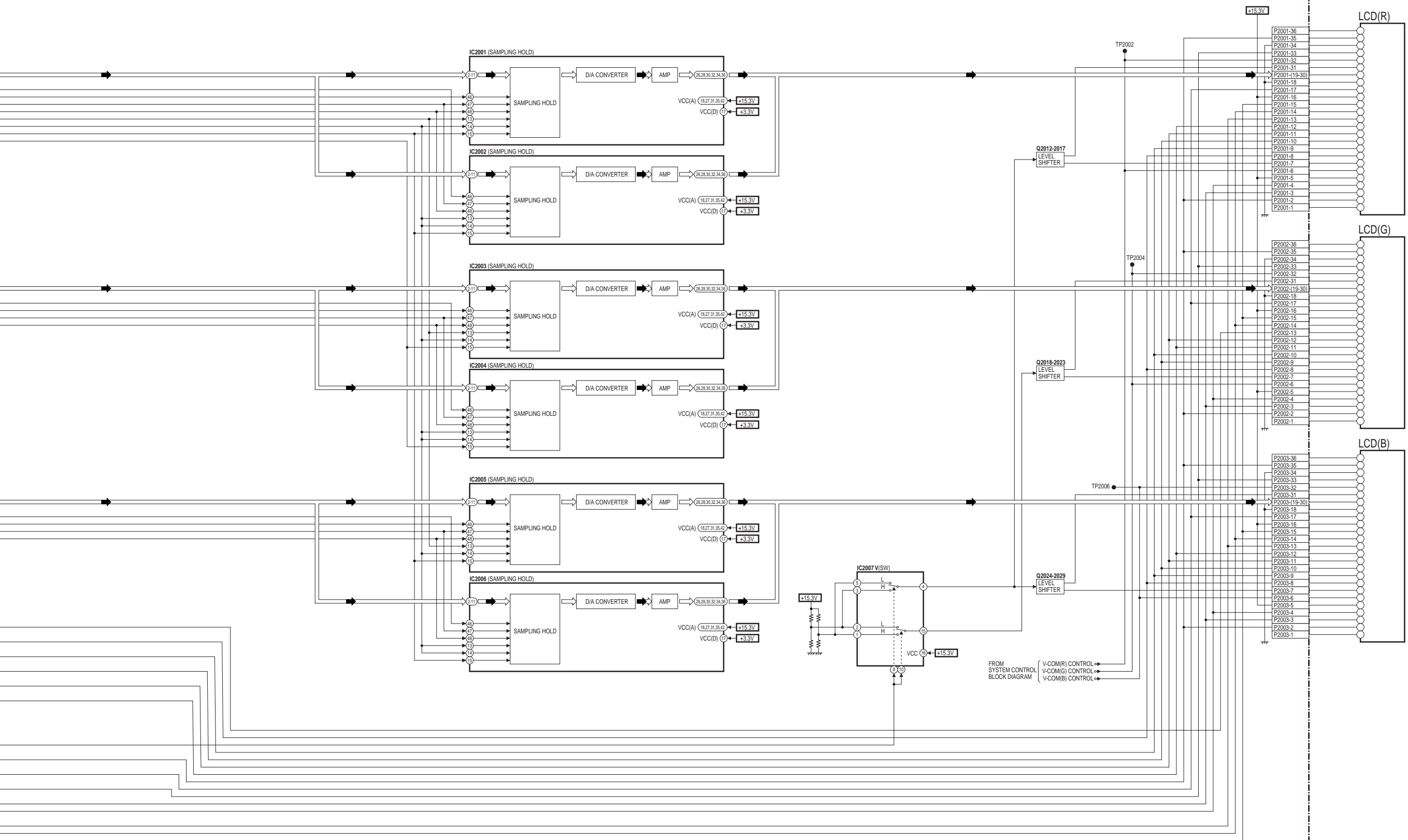
◀ MAIN VIDEO SIGNAL ◀ SUB VIDEO SIGNAL ◀ VIDEO SIGNAL(MAIN/SUB) ◀ CARD Y/PB/PR SIGNAL

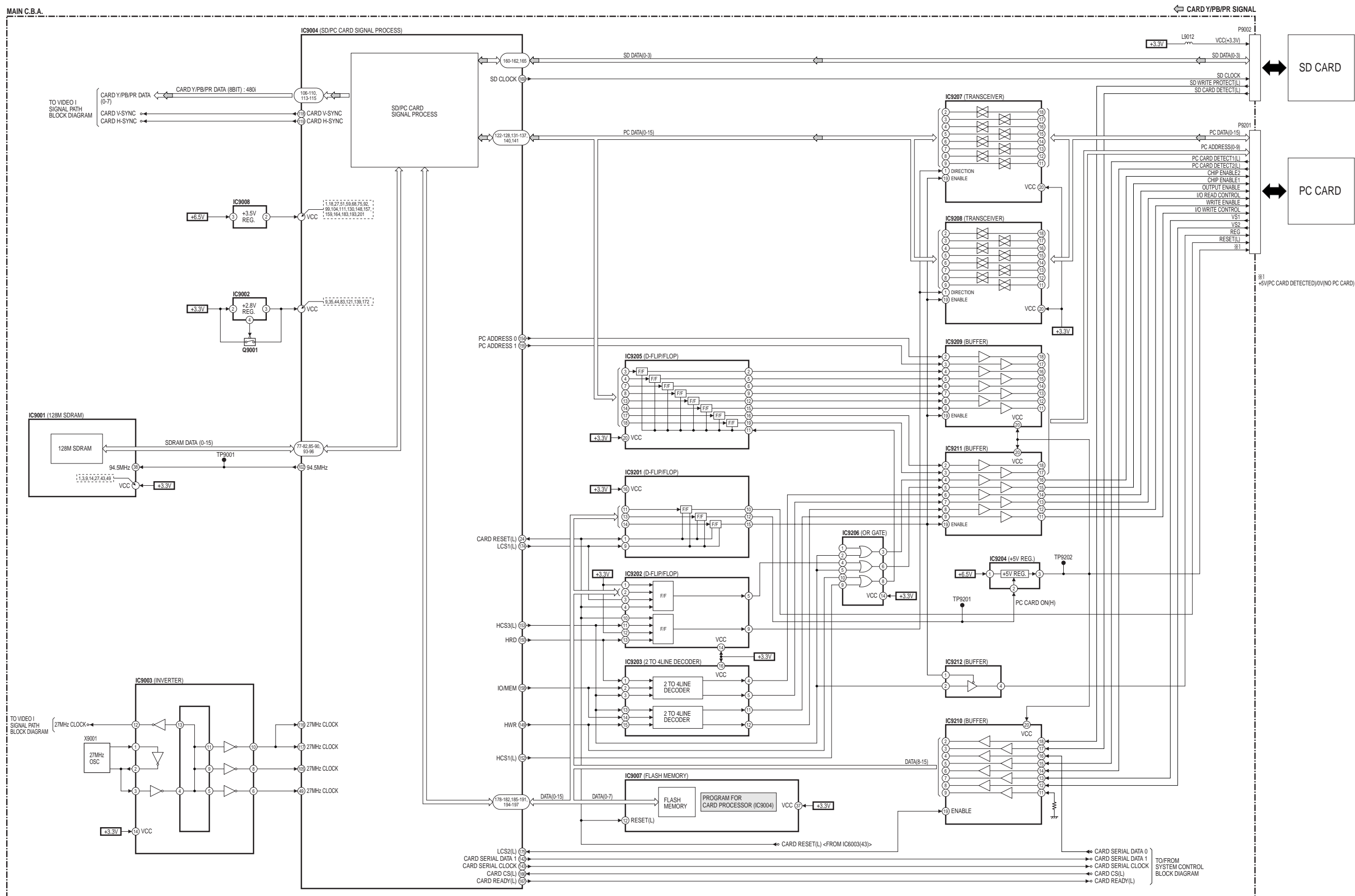


VIDEO SIGNAL PATH II BLOCK DIAGRAM (1/2)



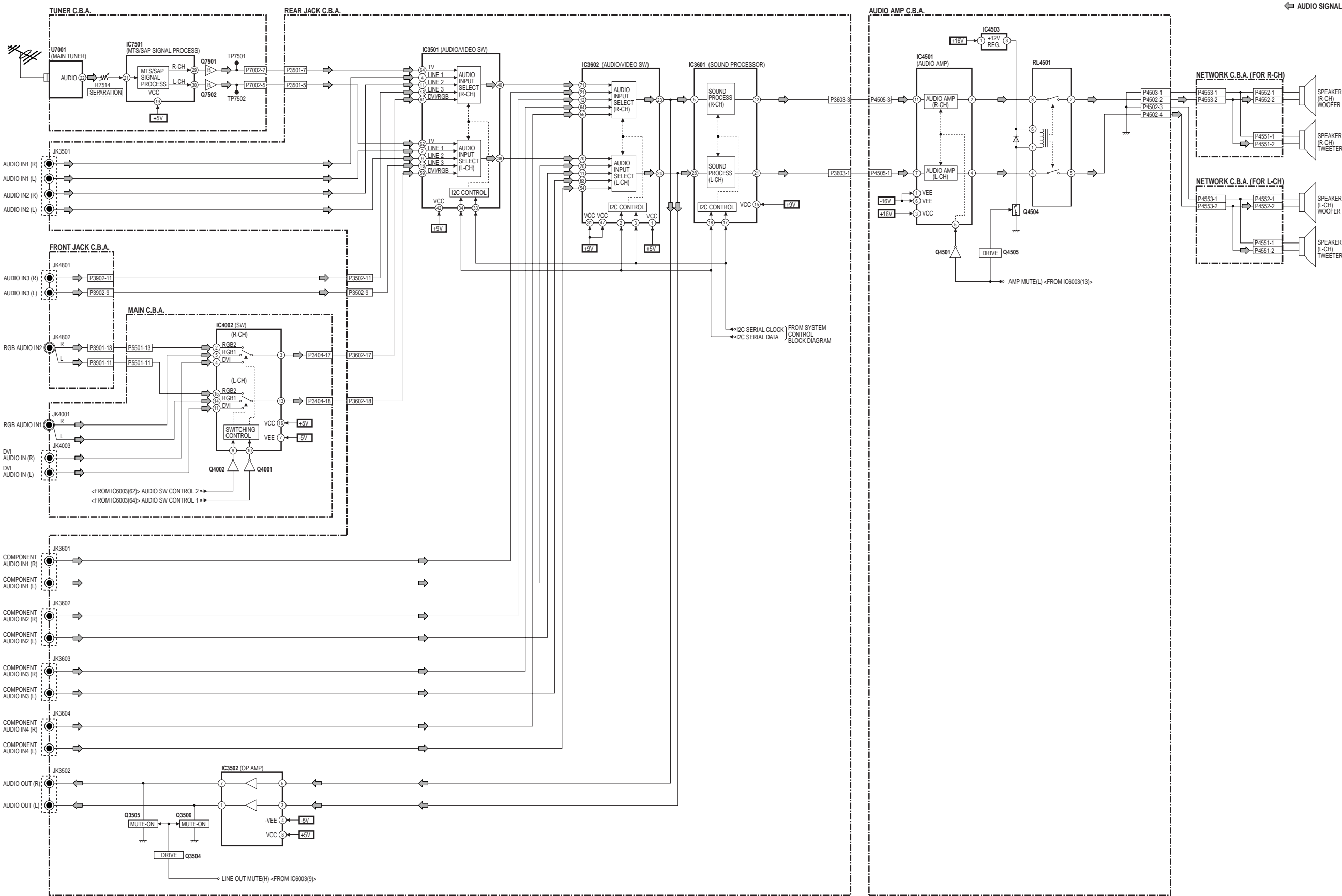
← VIDEO SIGNAL(MAIN/SUB)



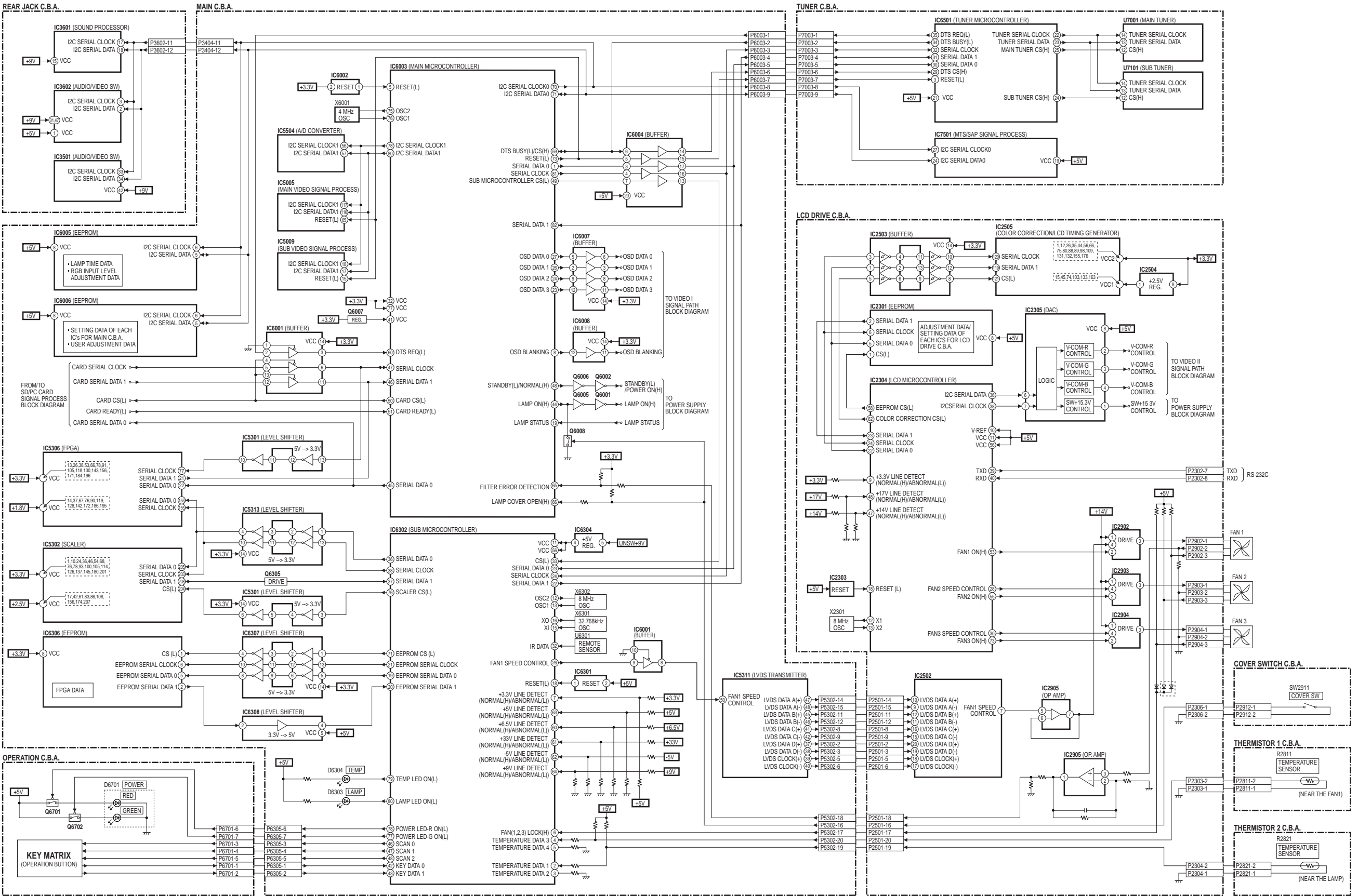


PT-50LC13

AUDIO SIGNAL PATH BLOCK DIAGRAM

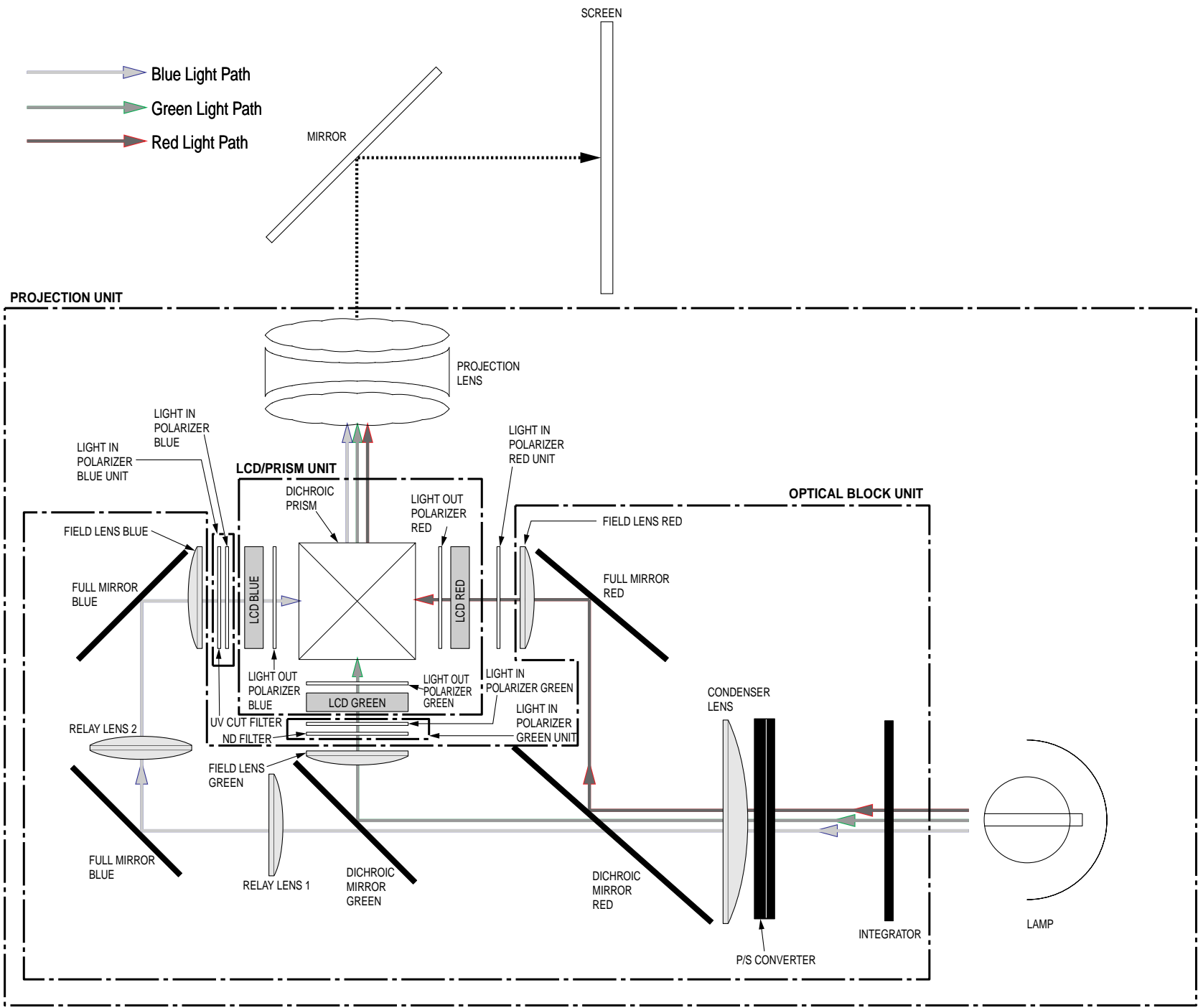


SYSTEM CONTROL BLOCK DIAGRAM




SYSTEM CONTROL BLOCK DIAGRAM
PT-50LC13

OPTICAL BLOCK DIAGRAM

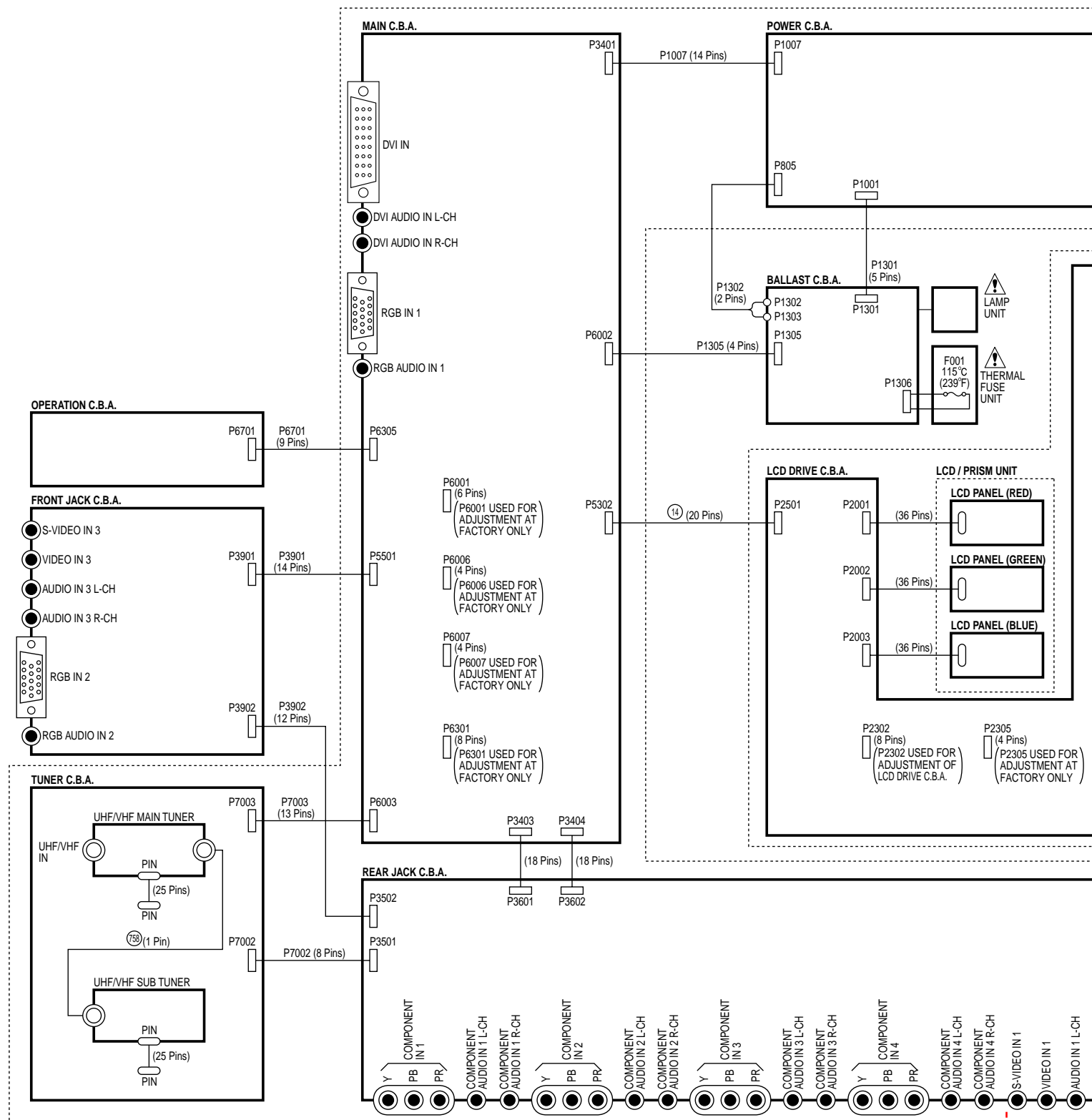


9.2. INTERCONNECTION SCHEMATIC DIAGRAM

INTERCONNECTION SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

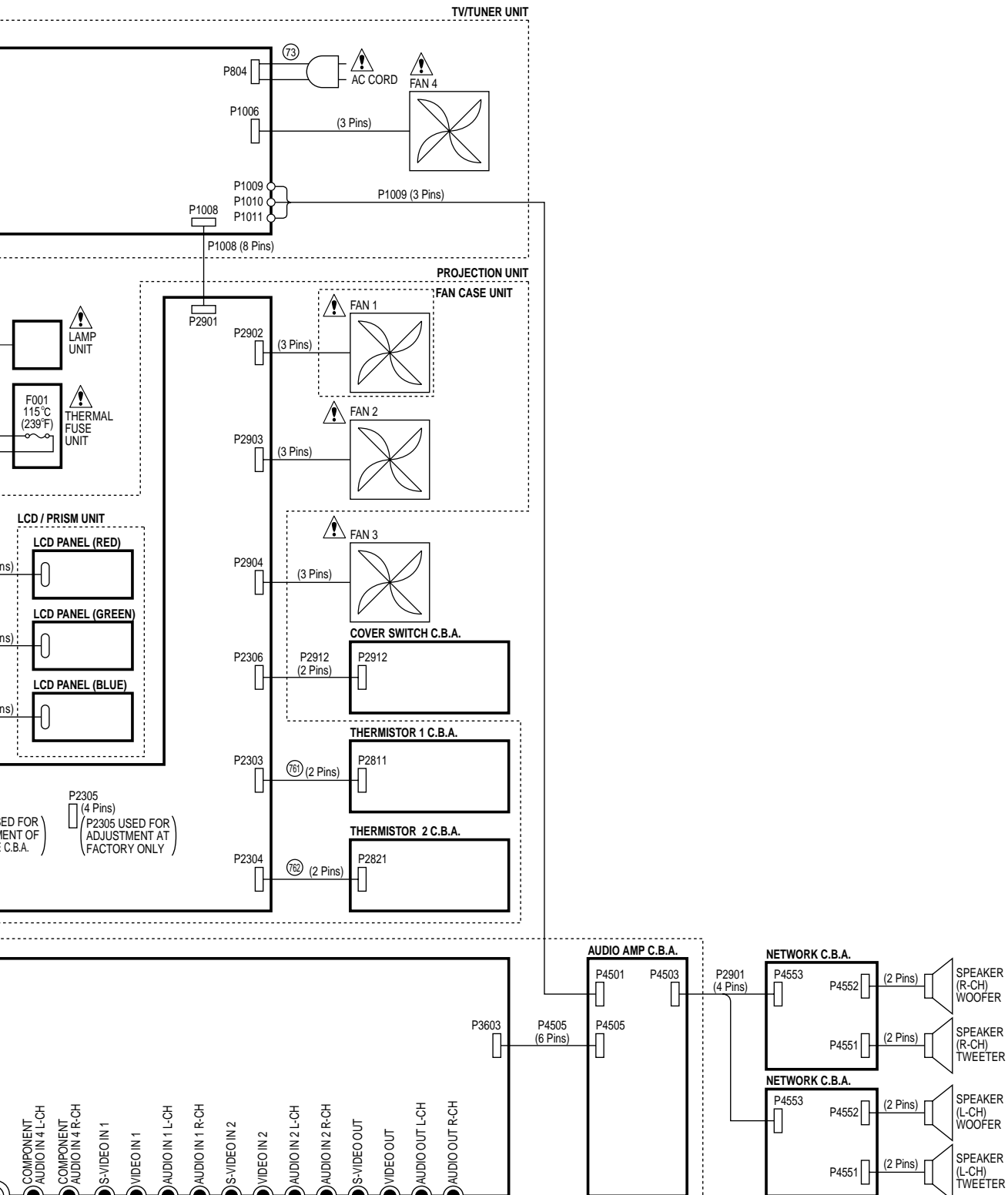
THERMAL FUSE UNIT REPLACEMENT NOTE:
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE NUMBER LSJA0464-FE (115°C).
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCENDIE N'UTILISER QUE DES FUSIBLE DE MÊME TYPE NUMÉRO LSJA0464-FE (115°C)



RE HAZARD,
0464-FE (115°C).
RISQUES

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
THE LAMP UNIT IS NOT SUPPLIED AS A REPLACEMENT PART.
WHEN REPLACING, REPLACE THE LAMP UNIT WHICH IS
SUPPLIED AS A OPTIONAL ACCESSORY.

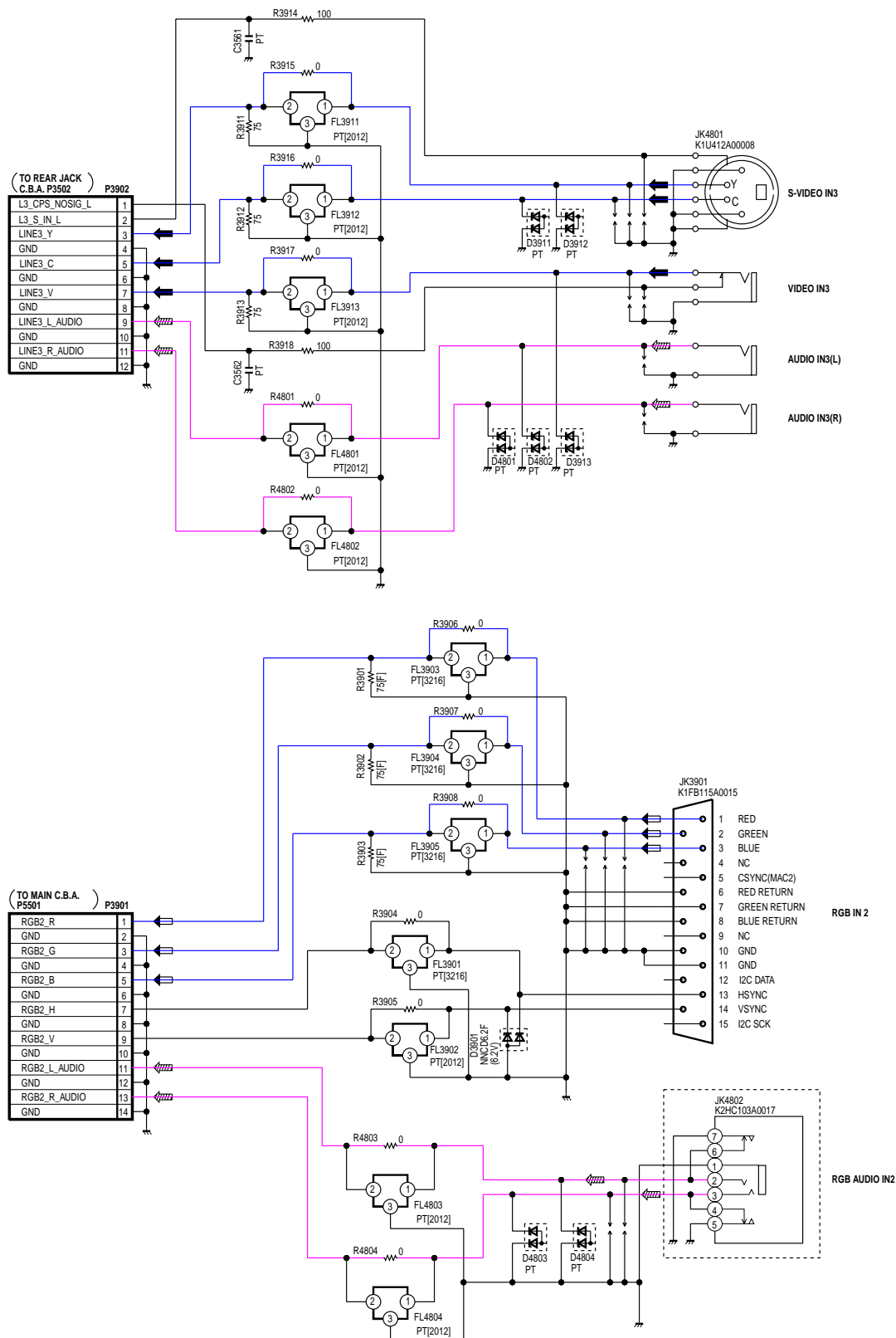


INTERCONNECTION SCHEMATIC DIAGRAM
PT-50LC13

9.3. FRONT JACK SCHEMATIC DIAGRAM

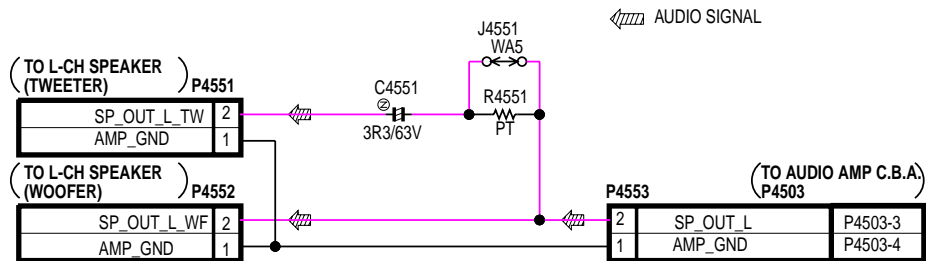
FRONT JACK SCHEMATIC DIAGRAM

VIDEO SIGNAL(MAIN/SUB)
 SUB VIDEO SIGNAL
 AUDIO SIGNAL



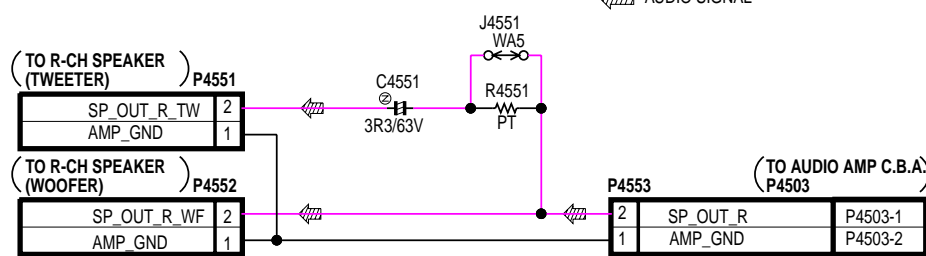
9.4. NETWORK/ THERMISTOR 1/ THERMISTOR 2/ OPERATION/ COVER SWITCH

NETWORK SCHEMATIC DIAGRAM
(FOR L-CH SPEAKER)



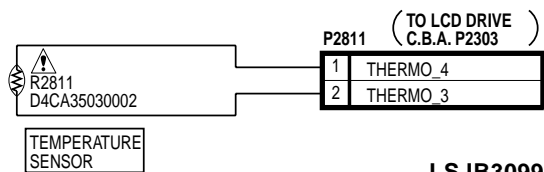
LSJB3097

NETWORK SCHEMATIC DIAGRAM
(FOR R-CH SPEAKER)




LSJB3097

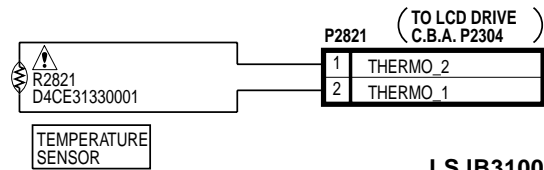
THERMISTOR 1 SCHEMATIC DIAGRAM



LSJB3099

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

THERMISTOR 2 SCHEMATIC DIAGRAM

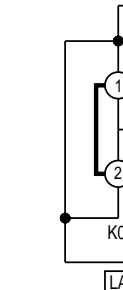


LSJB3100

OPERA

TO MAIN C.B.A. P6305
GND
STBY5V
P_LED_G
P_LED_R
SCAN2
SCAN1
SCAN0
KEY_IN1
KEY_IN0

COVER



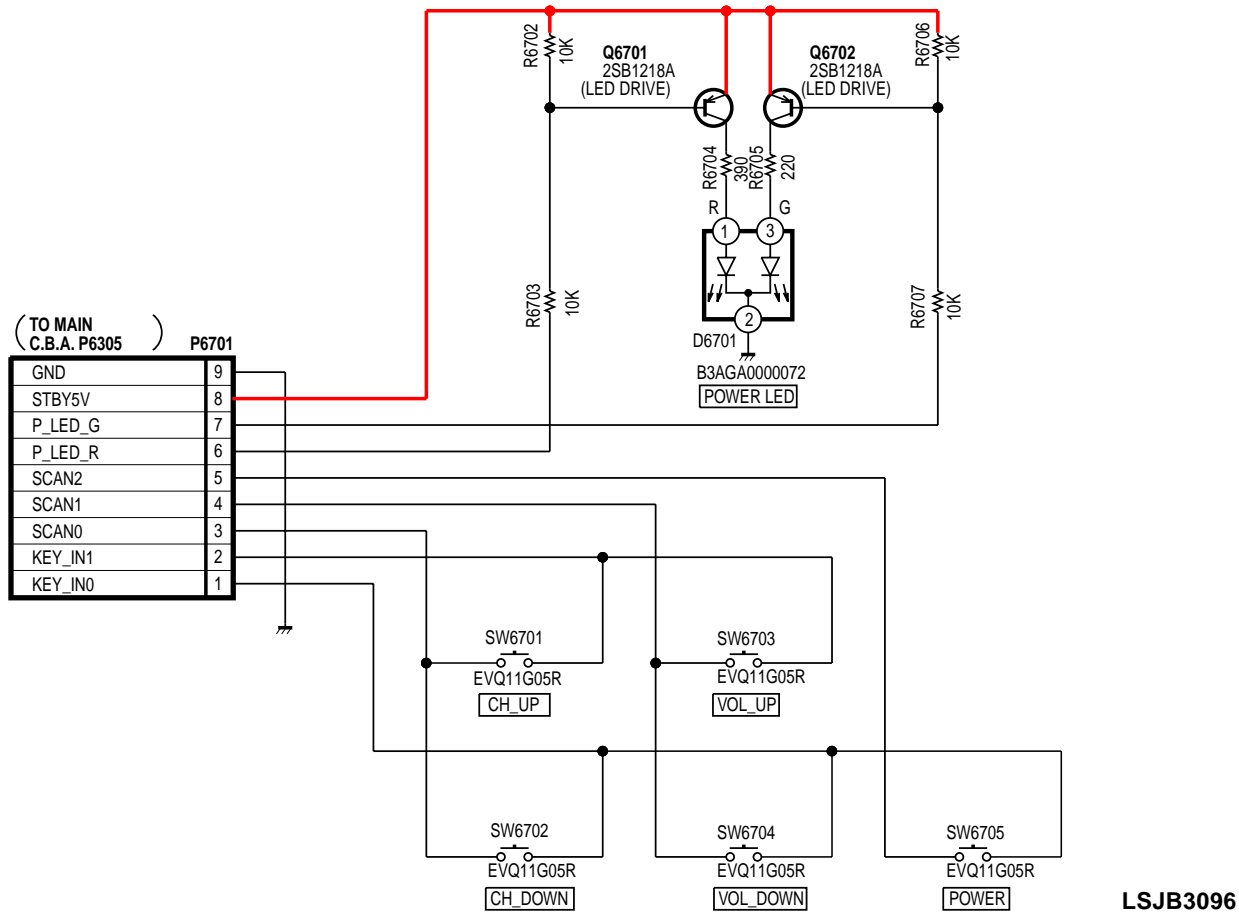
POWER SWITCH SCHEMATIC DIAGRAMS

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

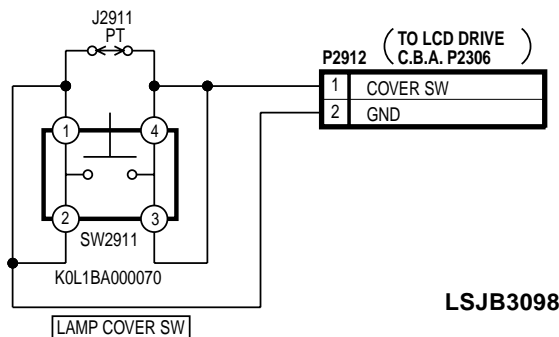
NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.

OPERATION SCHEMATIC DIAGRAM

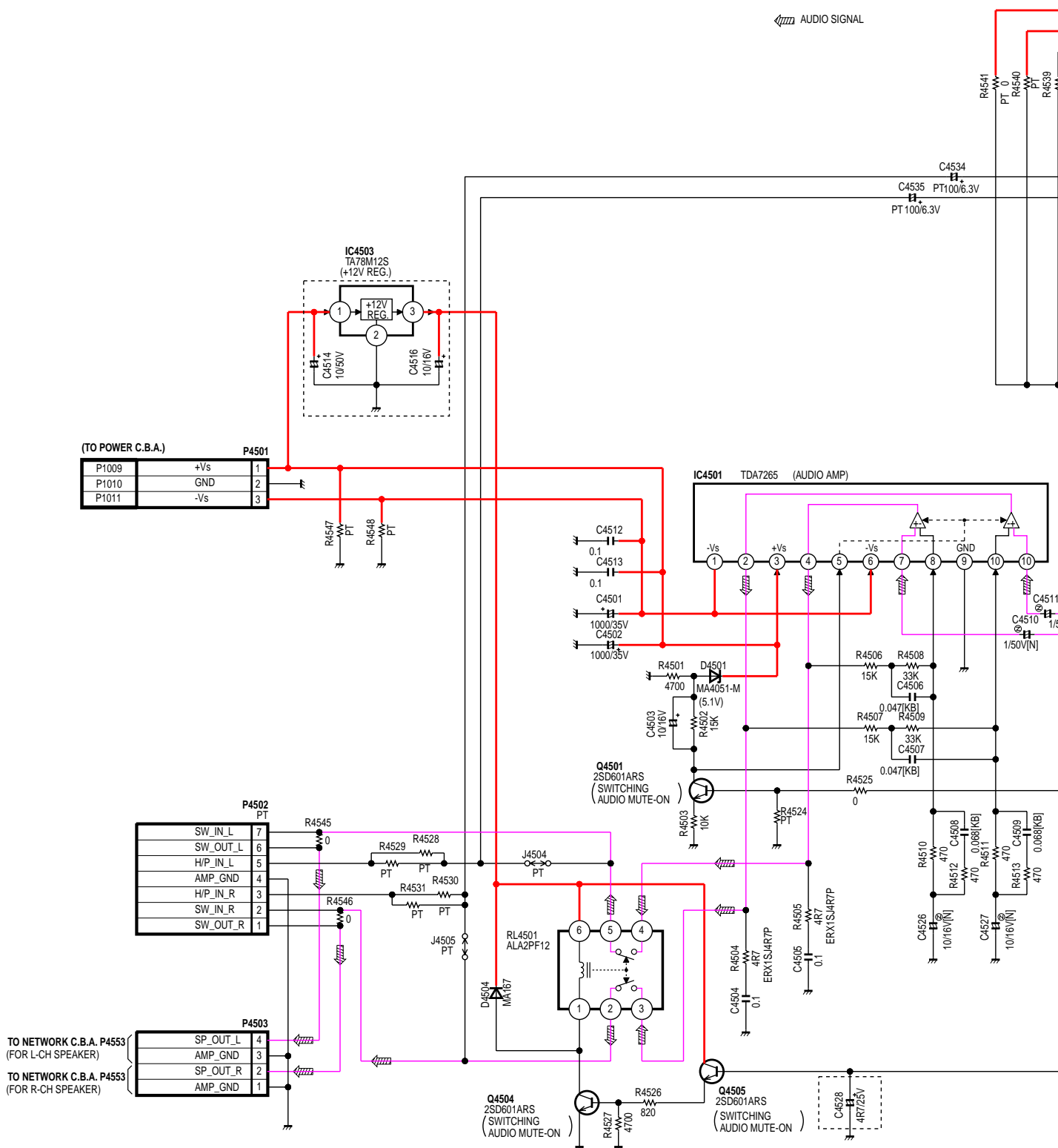


COVER SWITCH SCHEMATIC DIAGRAM



NETWORK SCHEMATIC DIAGRAM
THERMISTOR 1 SCHEMATIC DIAGRAM
THERMISTOR 2 SCHEMATIC DIAGRAM
OPERATION SCHEMATIC DIAGRAM
COVER SWITCH SCHEMATIC DIAGRAM
PT-50LC13

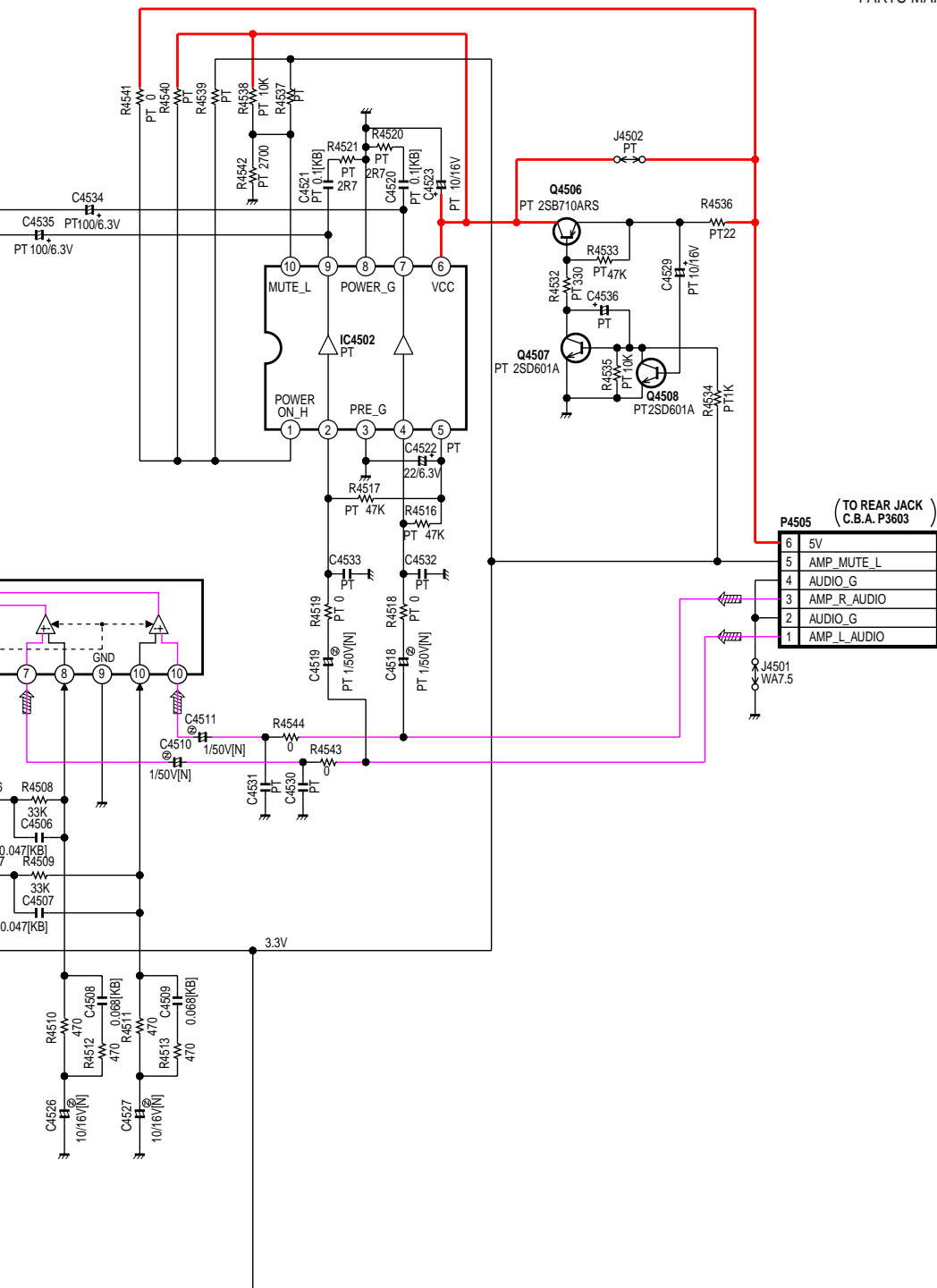
69



NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

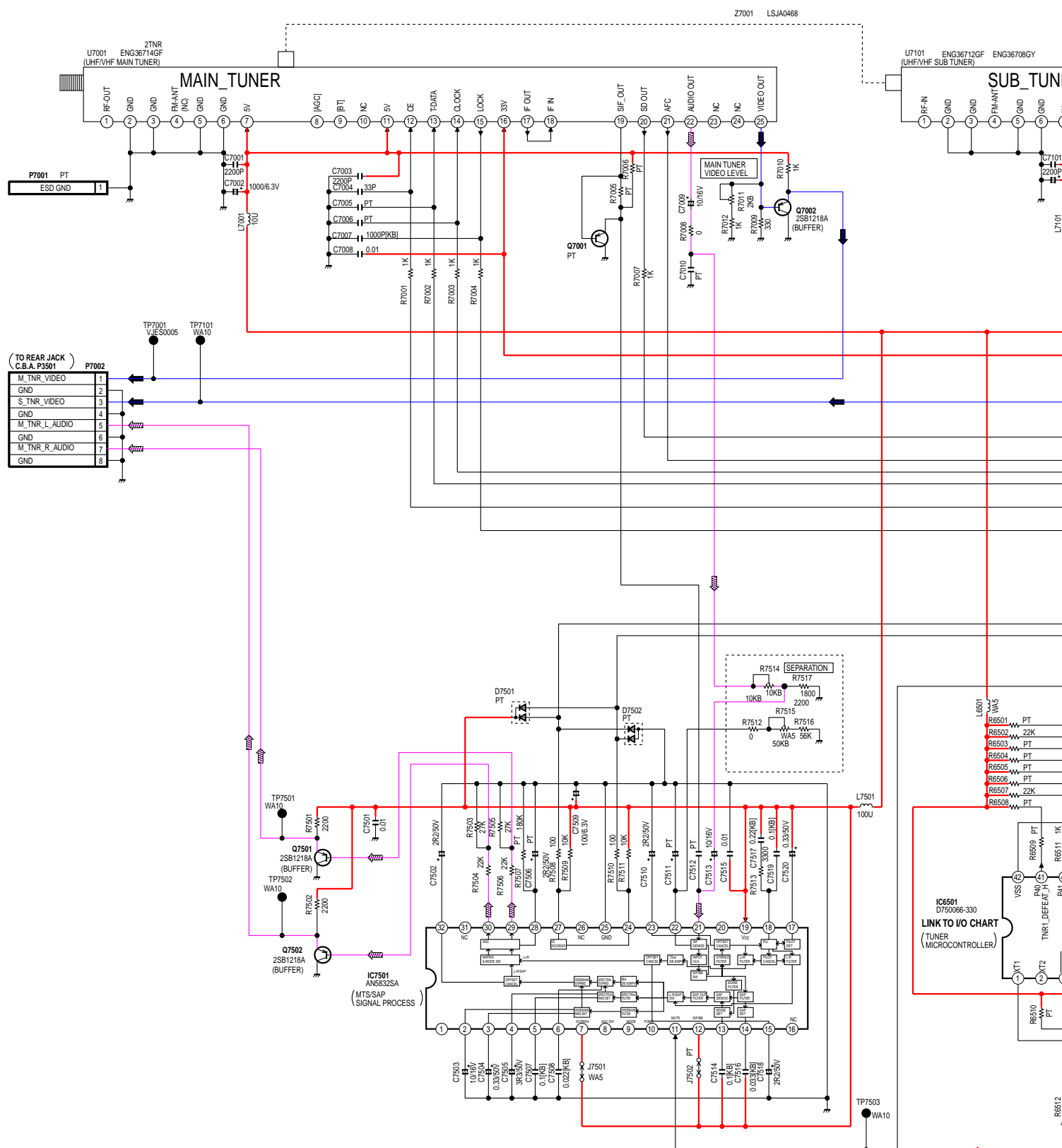


[LINK TO VOLTAGE CHART](#)

LSJB3092
AUDIO AMP SCHEMATIC DIAGRAM
PT-50LC13

9.6. TUNER SCHEMATIC DIAGRAM

TUNER SCHEMATIC DIAGRAM



NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

